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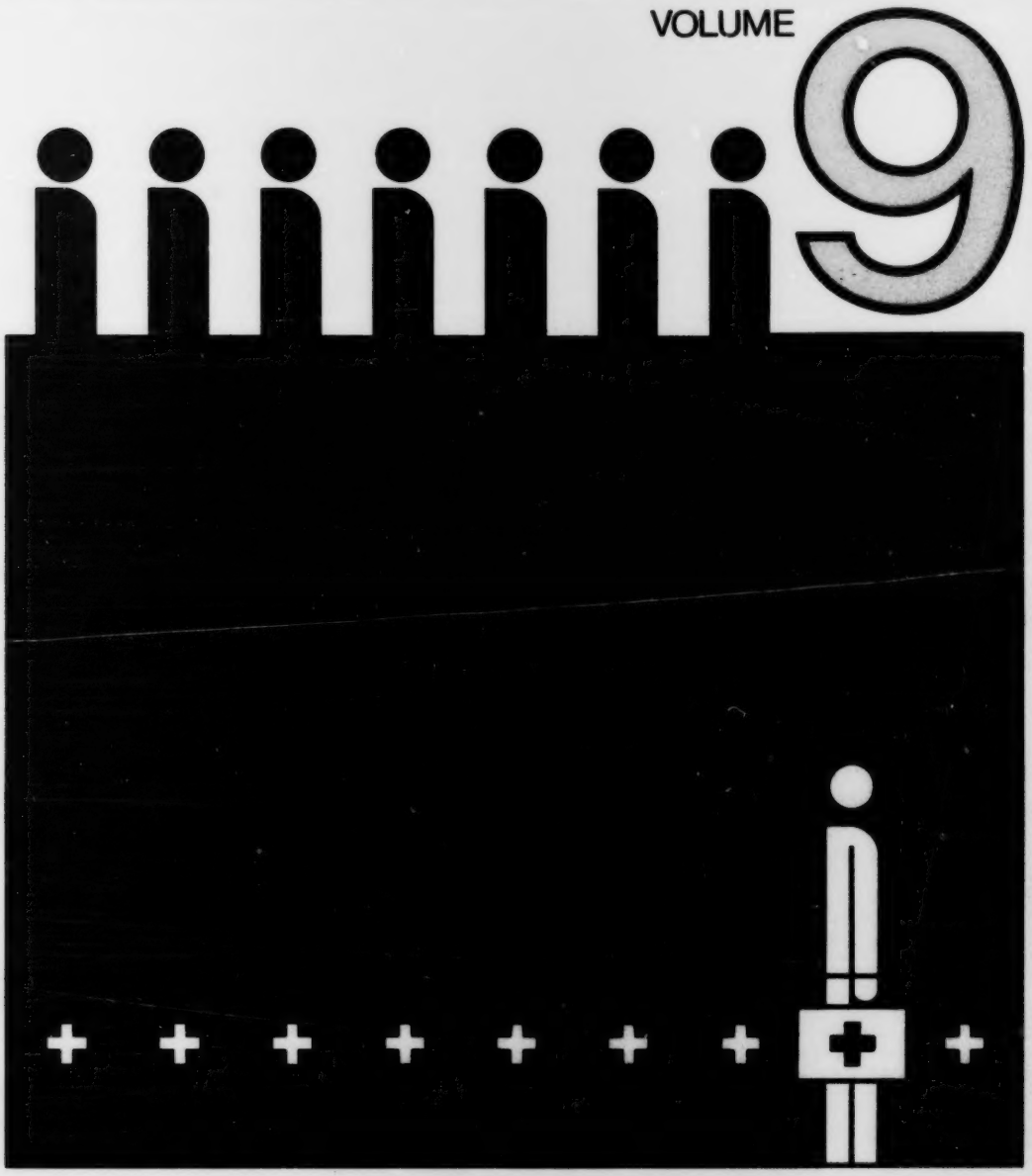
SALUS: LOW-COST RURAL HEALTH CARE AND HEALTH MANPOWER TRAINING

an annotated bibliography with special emphasis on developing countries

Editor: ROSANNA M. BECHTEL

VOLUME 9



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Postal Address: Box 8500, Ottawa, Canada K1G 3H9
Head Office: 60 Queen Street, Ottawa

Bechtel, R.M.

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SALUS: LOW-COST RURAL HEALTH CARE AND HEALTH MANPOWER TRAINING

An annotated bibliography with special emphasis on developing countries

Volume 9

Editor: Rosanna M. Bechtel

Abstracts written by: Rosanna M. Bechtel, Elisabeth Bollinger, Hope Cadieux-Ledoux, Anita Firth, Frances Morgan, and David Paul-Elias

(This is the ninth in a series of annotated bibliographies on low-cost rural health care and health manpower training. These volumes are published irregularly.)

Contents

Preface 5

Abbreviations and Acronyms 6

I Reference Works 7

II Organization and Planning 9

1 Health workers 9
2 Organization and administration 12
3 Planning 16
4 Geographical distribution of health services and workers 23
5 Financial aspects 24
6 Cultural aspects 24
7 Epidemiological, family planning, maternal child health, nutrition, and disease control studies 26

III Health Care Implementation 42
1 Inpatient care 42
2 Outpatient care 44
3 Mobile units and services 48
4 Health education 48
5 Appropriate technology 51

IV Health Workers — Training and Utilization 54
1 Medical personnel 54
1 Professional 54
2 Auxiliary 57
2 Nursing personnel 57
1 Professional 57
3 Midwives and family planning workers 58
1 Professional 58
2 Auxiliary 59
4 Dental personnel 59
1 Professional 59
2 Auxiliary 60
5 Laboratory and X-ray technicians (no entries this volume)
6 Environmental health workers 60
7 Occupational and physical therapists 60
8 Health educators 60
9 Teaching aids 61
1 Health care, nutrition, and disease control 61
2 Family planning and midwifery 65

V Formal Evaluative Studies 67
1 Health workers 67
2 Organization and administration 69
3 Planning 74
4 Geographical distribution of health services and workers 75
5 Financial aspects 77
6 Cultural aspects 78
7 Epidemiological, family planning, maternal child health, nutrition, and disease control studies 83

Author Index 120

Subject Index 131

Geographic Index 147

Preface

Frequent users of the SALUS bibliographies will be pleased to know that, following the publication of Volume 10, IDRC is planning to issue a cumulative index to all 10 volumes. This index should greatly facilitate manual searching, although users are reminded that computer searchers of the data base are available on demand from the SALUS Manager. Please keep in mind that, because it is more up-to-date, the data base contains many entries in addition to the documents cited in the printed bibliographies.

Once again we would like to stress our difficulties in obtaining documents from developing countries. Please help us by sending any material that you consider suitable for inclusion in the SALUS system. We are particularly interested in unpublished materials in the subject areas specified in the chapter headings.

In cooperation with IDRC's in-house Micrographics Project, SALUS staff are testing some handheld, low-cost, sunlight-dependent microfiche readers that could be sent with SALUS microfiches to health workers in geographical areas where conventional microfiche readers are not available. We would greatly appreciate receiving both positive and negative comments from anyone who has used a cardboard-backed reader, especially under field conditions. Correspondence should again be addressed to the SALUS Manager.

In closing, I would like to give my customary thanks to Mrs Anita Firth and the other indexers for their help in the preparation of this volume.

Rosanna M. Bechtel
SALUS Manager
Information Sciences Division
International Development
Research Centre

Abbreviations and Acronyms

AID — Agency for International Development
BCG — Bacillus Calmette-Guerin
CARE — Cooperative for American Relief Everywhere
d — day
DDT — dichlorodiphenyltrichloroethane
DPT (DTP) — diphtheria-pertussis-tetanus
Engl — English
Fren — French
g — gram(s)
IPPF — International Planned Parenthood Federation
kcal — kilocalorie(s)
kg — kilogram(s)
ml — millilitre(s)
PAS — para-aminosalicylic acid
PCM — protein-calorie malnutrition
PHC — primary health care
Span — Spanish
UNDP — United Nations Development Programme
UNICEF — United Nations Children's Fund
US (USA) — United States of America
VDRL — Venereal Diseases Research Laboratories
WHO — World Health Organization

I Reference Works

See also: 5865.

5601 **American Council of Voluntary Agencies for Foreign Service, Inc., New York.** *Medicine and public health; a listing of U.S. non-profit organizations in medical and public health assistance abroad.* New York, American Council of Voluntary Agencies for Foreign Services, Inc., Technical Assistance Information Clearing House, May 1979. 168p. Engl.

This directory lists 300 non-profit organizations in the USA that are involved in providing medical and public health programmes abroad. The agencies are listed alphabetically and according to the countries in which they operate. A brief description of the objectives and programmes accompanies each entry. A chart organizes the agencies according to the following categories: disease control, material aid, medical services, nutrition, training of medical personnel, and population and family services. (FM)

5602 **Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Paris.** *Liste des ouvrages reçus au service de documentation: information sexuelle—adultes. (List of works received by the documentation service: sexual information for adults).* Paris, Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Sep 1977. 10p. Fren.
Unpublished document.

This publication presents, in alphabetical order by author, 83 references to books on the various aspects of human sexuality received by the *Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances*, Paris, during 1976 and 1977. Each citation is accompanied by a brief descriptive abstract and those received in 1977 are keyworded. (HC-L)

5603 **Elliott, K. ed(s).** *Auxiliaries in primary health care; an annotated bibliography.* London, Intermediate Technology Publications, 1979. 126p. Engl.
Revised version of entry 2104 (volume 4).

Section 1 of this annotated bibliography contains 144 entries concerning the education and training of auxiliaries in primary health care; section 2 comprises 213 documents on auxiliaries and community health and development. Entries are arranged alphabetically by author within each section and include author, corporate author, editor, title with English translation if necessary, conference, source, date, and paging information as well as an abstract. Five appendices provide geographical and subject indices, lists of journals and publishers referred to in the bibliography, and useful addresses. (RMB)

5604 **Henderson, J.O., Collins, S.M., Muller, L.L., Harrap, B.S. ed(s).** Commonwealth Scientific and Industrial Research Organization, Division of Food Research, Dairy Research Laboratory, Highett, Australia. Commonwealth Scientific and Industrial Research Organization, Central Information, Library and Editorial Section, East Melbourne, Australia. *Bibliography of infant foods and nutrition 1938-1977.* East Melbourne, Australia, Commonwealth Scientific and Industrial Research Organization, Editorial and Publications Service, 1978. 322p. Engl.

The documents in this bibliography, which contains no abstracts, are initially grouped by subject: types of milk, carbohydrate components, lipid components, protein and nitrogenous components, bacterial flora, fermented and acidified milks, mixed and weaning foods, milk intolerance, special feeding problems, minerals and vitamins, nutritional and quality standards, and nutrition and disease. Subject areas are further subdivided into appropriate sections. Within each section, entries are presented by date and, within each year, alphabetically by author. Each entry also includes information on the author, title, and source. There are author and subject indices. (RMB)

5605 **Segal, H.E.** *Malaria research in Thailand: publications of the U.S. Army Medical Component, AFRIMS.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 9(4), Dec 1978, 581-586. Engl.

This bibliography contains references to 88 scientific publications resulting from malaria studies conducted at a US Army medical laboratory in Bangkok (Thailand) from 1962-1977. Each reference includes title, author(s), and date and place of publication. References are grouped under these headings: medical entomology, epidemiology and chemoprophylaxis, medicine and chemotherapy, parasitology and immunology, and veterinary medicine. (DP-E)

5606 **Thouez, J.P.** ***Health measurement bibliography.*** Social Science and Medicine (Oxford, UK), 13D(1), Mar 1979, 31-32. Engl.

This bibliography consists of alphabetical listings by author of material pertaining to the evaluation of health status. Topics covered include morbidity surveys, methods of evaluating health, analysis of illness behaviour, and aspects of child mortality, illness in the aged, and mental illness. (FM)

5607 **UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases, Geneva.** ***Newsletter.*** Geneva, UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases. Engl.

The newsletter of the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases contains reports on past conferences and advertisements for future ones, lists of publications, and articles on various aspects of disease control and on-going research. A typical issue covers malaria, schistosomiasis, leprosy, deadlines for receipt of research proposals, biomedical sciences, and research capability strengthening. (DP-E)

5608 **WHO, Geneva.** ***Reference material for health auxiliaries and their teachers/Matériel de référence destiné aux auxiliares sanitaires et à leurs enseignants.*** Geneva, WHO, WHO Offset Publication No. 28, 1976. 97p. Engl., Fren.

This revised and updated version of the 1973 bibliography contains 400 references to training materials for auxiliary health workers and their teachers, grouped under these headings: nursing and rural health, midwifery, maternal and child health, family planning, health education, nutrition, diagnosis and treatment, first aid, environmental health, laboratory procedures, and miscellaneous. Each entry contains author, title, and source information and a brief abstract. There are separate English and French sections, each containing some references to Spanish-language documents. Author and title indices are included. (RMB)

II Organization and Planning

II.1 Health Workers

See also: 5630, 5901, 5902, 5903, 5906, 5922, 5937.

5609 **de Glanville, H.** *Doctors on tap, not on top.* AFYA (Nairobi), 13, Mar-Apr 1979, 34-38. Engl.

A restatement of some of Dr. David Werner's ideas, this article examines the attitudes and roles of primary health care workers. Rather than the typical health care pyramid with the doctor on top giving orders and the unquestioning community on the bottom, the people should come first and the community health workers should lead the health team. In addition, the community health workers must avoid adopting the professional health worker's elitist attitudes in his relationship with the people and help those above him to renounce these attitudes as well if primary care is to succeed. (DP-E)

5610 **Fülöp, T.** *Educating the educators.* WHO Chronicle (Geneva), 32(8), 1978, 303-306. Engl.
Also published in French, Russian, and Spanish.

One of the major obstacles to the establishment of schools for health personnel is the scarcity of teachers. According to rough estimates, several hundred thousand new teachers need to be trained not only for new schools but also for existing understaffed institutions. Beyond these quantitative needs, there are acute qualitative needs for teacher training that member states are attempting to meet through a long-term comprehensive WHO programme begun in 1969. This article examines the teacher's job description, the methods and participants in teacher training programmes, and the WHO programme. (DP-E)

5611 **Hearn, C.R.** *Nursing workload determination: development and trials of a package.* Medical Informatics (London), 2(2), 1977, 91-901. Engl. 11 refs.

The author describes a methodology for calculating nursing workload and numbers and grades of staff required to provide necessary care to selected groups of patients. At present, the study refers only to geriatric patients in hospital wards but will later be extended to other medical specialities. The method of testing the prototype geriatric package is presented and the 1st trial discussed. The proposed future development of the project is examined. (DP-E)

5612 **Joseph, S.C.** *Innovation and constraints in health manpower policy: a case history of medical education development in Cameroun.* Social Science and Medicine (Oxford, UK), 13(2), Jun 1979, 137-142. Engl. 20 refs.

In attempting to achieve a broader distribution of basic health services, a central policy dilemma arises: how to reform medical education in order to provide appropriate health manpower in reformed health services systems. The University Centre for Health Services in Cameroon developed a medical education programme to train workers in locally relevant skills. However, pressures toward more traditional forms of medical education at the outset of the programme posed major obstacles to achieving the school's original objectives. The author concludes that both health services and medical education reforms are probably necessary in order to provide broader distribution of appropriate care. (Modified journal abstract)

5613 **Kambire, P.** *Formation des personnels de santè et le dèveloppement des enseignements mèdicaux en Rèpublique de Haute-Volta. (Training of health personnel and the development of medical education in Upper Volta).* Médecine d'Afrique Noire (Paris), 26(5), May 1979, 367-373. Fren.

After a brief survey of professional and paraprofessional medical personnel in Upper Volta, the author examines the development of medical training. Paramedical recruitment and training have been closely linked to various campaigns during epidemic periods. The administrative reorganization of public health education is also discussed. The national school of public health, established in 1977, is divided into four sections for the training of registered nurses, midwives, assistant nurses, and social workers. A national plan for future development of health manpower training and a project to create rural health centres and train auxiliary midwives and itinerant health officers are also considered. (FM)

5614 **Mace, D.R., Bannerman, R.H., Burton, J.** *Teaching of human sexuality in schools for health professionals.* Geneva, WHO, WHO Public Health Papers No. 57, 1974. 47p. Engl. Refs.

The authors outline the major elements of sex education for health professionals. Training must focus on the acquisition of attitudes, skills, and knowledge. Curriculum planning involves establishing a timeframe for programmes and choosing teaching methods, evaluation techniques, and resource material. A brief review is made of current training programmes in human sexuality in the USA, Europe, South America, and Asia. Problems encountered in introducing such courses are discussed, as well as the criteria for success. A list of short- and long-term activities such as surveys, conferences, specialist training, and programme development is aimed at encouraging further research in this field. (FM)

5615 **Marshall, E.C.** *Optometry as an emerging profession in the emerging Third World nations.* Journal of the American Optometric Association (St. Louis, Mo.), 49(8), Aug 1978, 887-892. Engl. 15 refs.
International Ophthalmic Optical Congress, Dusseldorf, Germany FR, 16 May 1977.

Because 75%-85% of the cases of blindness in developing countries are preventable or curable, the need for trained optometrists is acute. The author, himself an optometrist, describes the activities of the profession and gives an historical overview of the diagnosis and treatment of eye diseases and vision impairment. He suggests that the functions of optometrists in developing countries be expanded to include both health education and early screening, diagnosis, and referral of patients to the appropriate specialist. (DP-E)

5616 **Nosny, P.** *Action de la coopèration dans le domaine des personnels sanitaires après l'indépendance de l'Afrique et de Madagascar. (Action of aid programmes in the area of health care personnel after independence in Africa and Madagascar).* Bulletin de l'Académie National de Médecine (Paris), 162(7), 1978, 625-628. Fren.
See also entry 5645.

Since the independence of Madagascar in 1960, France has financed a system of aid programmes in order to assure the continuity and quality of health care in that country. This article concentrates on assistance given in the area of medical and paramedical personnel during the past 15 years. Indigenous health services still rely heavily on imported professional personnel from France, but priority has been given to the training of local students. In the paramedical sector, the situation has improved greatly, with nearly 35 000 native workers and only 295 French. Each state has its own training schools and recruitment levels are high. (FM)

5617 **Parrochia, E., Goic, A.** *Metodología para la estimación del requerimiento de médicos: su aplicación en medicina interna. (Methodology for estimating the number of physicians needed: its application to internal medicine).* Revista Médica de Chile (Santiago), 106(9), Sep 1978, 721-733. Span. 17 refs.

This paper describes a methodology that was developed in Chile for estimating health manpower requirements and applies it to the field of internal medicine. The methodology involves defining the functions of internists in hospitals of three levels of complexity and calculating the number of internist-hours required in each hospital for every 100 000 population. Because of regional and district variations in the values of internist-hours:100 000 population, the model is considered to reflect more accurately a country's needs than would a straight physician:population ratio. (HC-L)

5618 **Ray, D.K.** *Manpower training.* Nursing Journal of Singapore (Singapore), 17(2), Nov 1977, 48-50. Engl.
Originally published in World Health (Geneva), Apr 1977, 24-29.

The aim of health manpower planning is to ensure that the required number of appropriate personnel are available at the proper time to staff the health services. Achievement of this aim is complicated by a number of human factors, e.g., manpower cannot be produced at short notice, cannot be stored, and will not perform well without suitable motivation (working conditions, career opportunities, etc.). This paper points out the causes and consequences of a lack of proper health manpower planning, emphasizing that planners must become involved in the implementation process if their plans are to be successfully converted into reality. (HC-L)

5619 **Roemer, M.I.** *Allied health manpower in developing and socialist countries.* In Roemer, M.I., Health Care Systems in World Perspective, Ann Arbor, Mich., Health Administration Press, 1976, 203-209. Engl.
For complete document see entry 6010; originally published as "Role of Allied Health Manpower in Developing and Socialist Countries" in Journal of Allied Health, 3, Summer 1974, 77-85.

Four basic types of auxiliary health workers are employed in developing and socialist countries: traditional healers, paramedical health workers (auxiliary nurses, midwives, and X-ray technicians), elementary doctor substitutes (feldshers, barefoot doctors), and trained primary health practitioners (feldshers, midwives, and medical assistants). The aptitudes and functions of each type are described. The author points out that: the roles of auxiliaries are constantly changing and depend heavily of the available supply of physicians, the organization of local health services, and the national philosophy regarding health; the attitudes of government authorities toward traditional healers are influenced by history as well as politics; and auxiliary training programmes are determined by the national educational system and language and themselves determine how far the auxiliary can progress in the career structure. (DP-E)

5620 **Solberg, A.I.** *Survey of methodologies used for determining health manpower requirements.* Springfield, Va., National Technical Information Service, Sep 1976. 68p. Engl. 107 refs.

This monograph presents a comparative review of various methodologies that have been used by federal, state, and local agencies in the USA to determine manpower requirements for these professions: medicine, nursing, dentistry, optometry, pharmacy, and podiatry. It includes a glossary of terms found in the literature of manpower planning; an explanation of the method, sources, and criteria used to gather the information; a discussion of the assumptions, strengths, and deficiencies of the five general categories of methodologies that were identified; and an extensive bibliography. (HC-L)

5621 **Wagstaff, L.** *Model for team work in medical education and health care.* South African Medical Journal (Capetown), 54(22), 25 Nov 1978, 916-918. Engl.

The roles of the nurse, doctor, and paramedical members of the primary care health team in a South African hospital are described. With some additional training, nurses can develop the necessary clinical skills to deal with 80% of the patients routinely presenting at outpatient clinics. In addition to seeing the remaining patients, the doctor should assist with training, monitor and evaluate the whole service, and act as manager and consultant in support of the other team members. Administrative, support, and domestic staff can be trained as health educators and provide valuable links with the community, whose participation is also important. Ways of evaluating the health team are discussed. (DP-E)

5622 **Walcoff, P., Nocerino, J., MacArthur, D.** *Technology required to support non-physician health care in rural areas; an investigation of health manpower resources for rural primary care delivery.* Springfield, Va., National Technical Information Service, Aug 1975. 96p. Engl. 44 refs.

The US Department of Health, Education, and Welfare plans to develop and test a number of manpower /technology combinations for the delivery of health services in underserved rural areas. This paper delineates, characterizes, and compares the various categories of non-physician health workers that might be considered for the manpower element of these combinations. These include nurse practitioners, medical assistants, and community health aides. (HC-L)

5623 **WHO, Copenhagen.** *Education of managers in health services; report on a working group.* WHO, Copenhagen, 1978. 40p. Engl. Refs.

Working Group on the Education of Managers in Health Services, Dusseldorf, Germany FR, 29 Nov-2 Dec 1977.

This WHO working group report discusses health care management and managers, the key issues in health services management (public policy-making and health care management, the managerial role of physicians, the need for improved nursing management), management education in the European region, development of management education programmes for health services, health management education and health services research, promotion of national management education programmes, and the role of international collaboration. Recommendations at the national and international levels are made. Appendices contain a list of participants, the agenda, and an article on health management education and training. (AF)

5624 **WHO, Geneva.** *Health manpower development.* Geneva, WHO, 11 Mar 1976. 71p. Engl.

Part 1 of this WHO report covers health manpower development activities carried out since 1971 and part 2 presents proposals for future activities. Part 3 contains a progress report on the multinational study of the international migration of physicians and nurses, while part 4 deals with the training and utilization of practitioners of traditional medicine and their collaboration with modern health care delivery systems. Included in the annexes are lists of 1971-1975 WHO publications on health manpower development, training programmes for teachers of medical and allied health sciences, WHO fellowships, 1950-1970 trends in medical manpower, etc., and copious statistical data. (DP-E)

5625 **WHO, Geneva.** *Training and preparation of teachers for schools of medicine and of allied health sciences.* Geneva, WHO, WHO Technical Report Series No. 521, 1972. 28p. Engl.

WHO Study Group on the Training and Preparation of Teachers for Schools of Medicine and of Allied Health Sciences, Geneva, Switzerland, 2-6 Oct 1972.

Recognizing that teachers need to be prepared not only in their specific subject areas but also in the process and methods of education, WHO convened a study group to review the needs, purposes, and modalities of teacher training for the health professions. This report defines the function for which training should prepare teachers; sets forward the goals, activities, and curricular content appropriate to the four categories of teacher for whom programmes must be designed (i.e., health professions teachers, educational specialists, educational leaders, and teachers of teachers); identifies research and service activities to be carried out in teacher training centres; and describes the WHO comprehensive, coordinated, long-term teacher training programme. Lists of teaching methods and instruments and guidelines for establishing teacher training centres are appended. (HC-L)

II.2 Organization and Administration

See also: 5693, 5838, 5849, 5851, 5905, 5919, 5987, 6005, 6009, 6010.

5626 **Boffey, P.M.** *Health care as a human right: Cuban perspective.* Science (Washington, D.C.), 200(4347), 16 Jun 1978, 1246-1250. Engl.

The organization of the Cuban health care system is described. Its spectacular advances in public health have been accomplished by improving living conditions across the board and investing more than most Third World countries directly into health programmes and health manpower training. Cuba now produces so many physicians that it has exported more than 1 000 to assist friendly regimes and has put an end to maldistribution by compulsory rural service. The key health facility is the polyclinic, which serves 25 000-30 000 persons. (DP-E)

5627 **Browne, S.G.** *Organizing a leprosy control programme.* Tropical Doctor (London), 9(2), Apr 1979, 93-96.

Fundamentals of leprosy control are reviewed, including such local factors as population density, leprosy prevalence, local attitudes to leprosy, geographical and climatic problems, and finance. Any strategy for organizing a leprosy programme should be based on a few simple objectives: diagnosis; treatment, mainly rendering patients non-contagious, preventing deformity, and controlling drug reaction; and prevention. Problems of laboratory investigations, classification, treatment, prevention of complications, reconstructive surgery, and case-finding are also discussed. (DP-E)

5628 **Castellanos, I.** *Policlínico de la comunidad: en el camino de ofrecer la mejor atención médica. (Community polyclinics: an attempt to offer the best medical care).* Revista Cubana de Administración de Salud (Havana), 4(3), Jul-Sep 1978, 261-267. Span.

A new model for health care delivery that involves higher doctor:patient ratios, a more supportive doctor and patient relationship, and an expanded role for the doctor in the community has resulted in better care to the population served by the Pasteru polyclinic, Havana, Cuba. This paper describes how the new model was implemented in the polyclinic with the help of grassroots organizations such as the committees for the defense of the revolution and the Federation of Cuban Women. (HC-L)

5629 **Davidson, R.N.** *Community paediatrics in Cap Bon, Tunisia.* South African Medical Journal (Capetown), 54(25), 16 Dec 1978, 1065-1067. Engl. 14 refs.

Some of the features of a community health programme in a rural area of Tunisia are described. The programme was based on these principles: understanding the population in order to identify priority problems and target groups; maximum utilization of auxiliary health workers; standardization of consultations, history-taking, treatment, and referral; gradual introduction of new ideas; decentralization and the establishment of 317 assembly points; nutrition clinics; and the integration of curative and preventive services. The standard treatments for diarrhea and skin infections are presented. (DP-E)

5630 **Dirección Sectorial de Salud del Poder Popular, Havana.** *Salud pública en Camaguey. (Public health in Camaguey).* Revista Cubana de Administración de Salud (Havana), 5(1), Jan-Mar 1979, 77-82. Span.

This paper traces the development of health services and training facilities in the province of Camaguey, Cuba. Before the Revolution (1958), the province had only 7 hospitals, 1 home for the elderly, and 1 training facility; it now boasts 22 hospitals, 18 polyclinics, 16 medical posts, 14 stomatological clinics, 4 maternity homes, 6 homes for the elderly, 1 blood bank, and 5 training centres. One of these, the health polytechnic institute, where technicians are trained for 14 specialties including nursing, statistics, X-ray, laboratory, etc., is briefly described. (HC-L)

5631 **Gálvez-Tan, J.** *Philosophy of community-based health programs.* Philippine Journal of Nursing (Manila), 48(3), Jul-Sep 1978, 77-78. Engl.

A community-based health programme recognizes that the health problems of any community are interrelated with its economic, political, and cultural problems; priority is therefore placed on using health as a way to motivate people to improve their standard of living and the quality of their lives. A distinction is made between community-based programmes and community-oriented programmes. The former require community participation in all aspects, while the latter foster a paternalistic attitude in the staff and passive indifference in the recipient. (DP-E)

5632 **Gelfand, H.M., Pletsch, D.J., Schliessmann, D.J., Young, M.D.** *Report of a visit by an APHA-USAID malaria team to Kenya, 27 January-1 February 1980.* n.p., n.d. l.v.(various pagings). Engl.
Unpublished document.

After examining the prevalence and epidemiology of malaria in Kenya, the authors trace the history of malaria control in that country and outline the structure of its health services. The current status of malaria control, including participating institutions and training facilities and programmes, is discussed. Attachments include reports on the situation in specific areas of Kenya. (DP-E)

5633 **Guha, P.K.** *Rural health scheme.* Journal of the Indian Medical Association (Calcutta, India), 70(10), 16 May 1978, 239-240. Engl.

The author proposes that the primary health centres (PHCs) in India's rural areas be expanded to 50-bed hospitals with X-ray and laboratory facilities and the necessary medical and support staff to provide health services and public health measures for 75 000-150 000 people. Each PHC would be backed by 6-8 subsidiary health centres with 10 beds and 2-4 doctors and other staff who would provide dispensary, maternal child health, and family planning services. If such a rural health centre scheme were adopted with steps to establish small-scale industries and agricultural cooperatives, rural health could reach optimal levels in 15 years. (DP-E)

5634 **Habicht, J.P.** *Assurance of quality of the provision of primary medical care by non-professionals.* Social Science and Medicine (Oxford, UK), 13B(1), Jan 1979, 67-75. Engl. 13 refs.

The acceptance of the once radical concept that non-physicians can provide primary health care is due to the obvious need in many communities for such care in spite of inadequate resources. Effective primary care must involve the family and the community, permit appropriate referrals within a medical system, and assure quality care by proper training and supervision of auxiliary workers. Such a programme of training and supervision, as well as quality control methods, are applied in some Guatemalan villages, where infant mortality was reduced by 65% and child mortality by 75%. Statistical data are included. (Modified journal abstract)

5635 **Hartwig, C.W.** *Church-state relations in Kenya: health issues.* Social Science and Medicine (Oxford, UK), 13C(2), Jun 1979, 121-127. Engl. 51 refs.

Modern health practices were introduced to much of the Third World by Christian missionaries and the institutions that they founded provide a substantial part of the total health care systems in Africa today. The increasingly important role of the state has led to church/state conflict over the financing and developing of health-promoting facilities in Africa. This paper examines the various factors affecting health policies in Kenya, with special reference to the role of church-related health organizations. Statistical data are included. (Modified journal abstract)

5636 **International Association of Agricultural Medicine, Paris.** *Proceedings: VII International Congress of Rural Medicine.* Oakdale, Iowa, Institute of Agricultural Medicine, International Studies Section, 1978. 428p. Engl. Refs.
Seventh International Congress of Rural Medicine, Salt Lake City, Utah, 17-21 Sep 1978.

This conference report includes 70 papers organized around seven topics related to rural medicine. The 1st section deals with youth and women in rural areas, covering maternal child health, school health, and nutrition. Section 2 studies the effects of living and working conditions on health status. Section 3 covers social hygiene and public health. A section on ergonomics discusses occupational health among farmers, including health problems caused by modern machinery and agricultural techniques. Section 5 on toxicology examines the effects of insecticides on health. The final sections present the results of discussions on the importance of cooperation between doctors and social workers and some of the major problems in rural primary care. Many papers contain statistical data. (FM)

5637 **Laguna, J.** *Niveles de atención de la salud en México. (Levels of health care in Mexico).* Gaceta Médica de México (Mexico City), 114(5), May 1978, 201-205. Span.

Health care delivery in Mexico is complicated by two factors: the existence of an industrialized population with highly developed health needs alongside a developing population with very basic health needs and a fragmented, uncoordinated health care delivery system. This paper gives a functional description of a coherent, three-tiered health system that would cater to the needs of all. The 1st level would provide primary care, the 2nd treatment in outpatient facilities and general hospitals, and the 3rd specialized care. (HC-L)

5638 **Laraqui, A.** *Santé publique au Maroc. (Public health in Morocco).* Médecine et Armées (Paris), 7(1), 1979, 7-10. Fren.

The administrative structure of public health in Morocco is composed of central and external services. Central services include the administration of personnel, equipment, and general services. A department of technical affairs, also part of central services, contains epidemiological services, an infrastructure division, and a population division responsible for family planning, nutrition, maternal child health, school health, and nutrition education. It is also responsible for various health research institutes and laboratories. The external sector is concerned with the administration of medical training and the management of hospitals, mobile health care, and laboratories. (FM)

5639 **Lasker, J.N.** *Role of health services in colonial rule: the case of the Ivory Coast.* Culture, Medicine and Psychiatry (Dordrecht, Netherlands), 1(3), 1977, 277-297. Engl. Refs.

A history of the health services in the Ivory Coast is divided into three phases: the establishment of the colony (1843-1919), the exploitation of the colony (1920-1945), and the era of political change (1946-1958). Factors influencing the distribution of health services, including region, urban-rural residence, class, and race, are examined. Characteristics of Ivory Coast medicine, mainly the tension between preventive and curative medicine and the distinction between professional and auxiliary health workers, are discussed. The history of medicine in the Ivory Coast must be seen as one of continual interplay of changes

in Western medical science, political events in Europe, the specific needs of the colonial administration, and social change in the lives of the people. (DP-E)

5640 **Markides, A.A.** Cyprus, Ministry of Health. *Annual report of the Medical Department for the year 1978.* Nicosia, Ministry of Health, n.d. lv.(various pagings). Engl.

The 1978 annual report of the Medical Department of the Ministry of Health, Cyprus, describes the services rendered by national health facilities and personnel, their improvements, and plans for future development. Divided into 8 sections, the report discusses preventive health services (diseases, maternal and child health services, health education, environmental health), care of the elderly, mental health, school health services, medical care (efforts to upgrade and increase health centres to cover all rural, remote and deprived areas; increase health manpower; etc.), other services (dental, pharmaceutical, laboratory, etc.), education and training of health personnel, and government-sponsored patients. Statistical data are included. (AF)

5641 **Menon, P.K.** *Crusade against leprosy.* World Health (Geneva), May 1979, 18-21. Engl.

The epidemiology of leprosy in India, which has 25% of the world's 12 million cases, is discussed; in many areas, the disease is endemic. The government has started a 5-year programme to reduce the prevalence, correct deformed cases, and reduce the infectious case rate by 75% by treating 3 million patients. The programme is staffed by community health workers and multipurpose workers who try to coordinate their activities with those of voluntary organizations. One such clinic, financed by the government and located in an endemic area, is served by a volunteer physician and nurse whose great compassion for their patients stems from the fact that they were both victims of leprosy as children and suffered the social consequences. (DP-E)

5642 **Merckx, V.** *Perspectives de la planification sanitaire en Tunisie rurale. (Health planning perspectives in rural Tunisia).* Cahiers de Sociologie et de Demographie Médicales (Paris), 17(2), Apr-Jun 1977, 56-65. Fren. 13 refs.

The author outlines some of the problems associated with establishing rural health services in Tunisia, as found by a Belgian technical assistance team. To improve the inequitable distribution of health facilities that favours urban, university hospitals, the team set up health centres on the WHO model. A pilot project was begun in the Cape Bon area, of which an important feature was the establishment of assembly points visited by itinerant nurses at regular intervals. The author also discusses wider, philosophical aspects of providing and maintaining health schemes and emphasizes the importance of overall socioeconomic development in bringing about lasting improvements in health status. (Modified journal abstract)

5643 **Mohan, C.** *Urban and integrated health service plan.* Royal Society of Health Journal (London), 98(6), Dec 1978, 272-274. Engl.

In order to close the gap between clinical medicine and public health schemes, the author advocates a programme to deliver integrated curative and preventive services in facilities called urban health centre complexes, which would be staffed by health teams consisting of professionals, auxiliaries, and social workers. Each centre would serve some 50 000-10 000 people and provide these services: outpatient (including dental) care, child health clinics, maternal health services, health education, therapy for speech and behaviour problems, geriatrics, treatment of sexually transmitted diseases, immunization, environmental health, occupational health, and health related social services. This model would be best perfected in urban areas and then extended to rural areas instead of the reverse. (DP-E)

5644 **Neumann, A.K., Wurapa, F.K., Lourie, I.M., Ofosu-Amaah, S.** *Strategies for strengthening health services infrastructure: a case study in Ghana.* Social Science and Medicine (Oxford, UK), 13C(2), Jun 1979, 129-135. Engl. 30 refs.

The Danfa Comprehensive Rural Health and Family Planning Project is a long-term collaborative project between a Ghanaian medical school and a US school of public health with financial and technical support from Ghana and USAID. Project efforts have focused on training, service, and research in a rural agricultural area north of Accra. Staff have been particularly concerned with strengthening the health services infrastructure in the area so that project activities can be replicated elsewhere. Training, information transfer, and cost control have been essential to institutionalizing project findings. (Modified journal abstract)

5645 **Nouy, P.** *Action de la coopèration dans le domaine des établissements sanitaires et de la recherche médicale après l'indépendance de l'Afrique et de Madagascar. (Assistance to health services and medical research in Africa and Madagascar after independence).* Bulletin de l'Academie National de Médecine (Paris), 162(8), 1978, 783-787. Fren.

See also entry 5616.

Since 1960, France has offered considerable financial and and technical aid toward the manitenance and staffing of medical, hospital, and research facilities that were established in Africa and Madagascar during 65 years of colonial rule. This assistance is briefly reviewed and discussed in this paper. (HC-L)

5646 **Roemer, M.I.** Peace Corps, Washington, D.C. *Health resources and planning in an African kingdom: Ethiopia.* In Roemer, M.I., Health Care Systems in World Perspective, Ann Arbor, Mich., Health Administrative Press, 1976, 60-65. Engl.

For complete document see entry 6010; origi-

nally published in Peace Corps Health Service Project in Ethiopia, Los Angeles, University of California, 1963, 1-10.

In Ethiopia, one of the few countries not colonized by a European power, Western-style health resources are especially scarce. This article examines the principal diseases (tuberculosis, gastroenteritis, parasitic diseases, malaria, typhoid fever, syphilis, and leprosy), general health services resources, personnel training, long-term health services planning, the Makelle and Dessei community health projects, and the role of the US Peace Corps in organizing these projects and training community health workers. (DP-E)

5647 **Roemer, M.I.** *Principles of health services in socialist China.* In Roemer, M.I., Health Care Systems in World Perspective, Ann Arbor, Mich., Health Administration Press, 1976, 86-89. Engl. 10 refs.

For complete document see entry 6010; originally published in Public Health Newsletter (Los Angeles, Cal.), Summer 1975, 8-11.

This paper summarizes the main principles that form the foundation for the remarkable achievements of the health services in the People's Republic of China since 1949. These principles are: 1) serve the workers, peasants, and soldiers; 2) prevention first; 3) unite traditional and Western medicine; 4) combine health service with the mass movement; 5) in health and medical work put the stress on rural areas; 6) fight against bureaucracy; and 7) promote local self-reliance. The application of some of these principles and the overall health administrative structure are examined. (DP-E)

5648 **Segal, J. ed(s).** *Mental health of rural America; the rural programs of the National Institute of Mental Health.* USA, Department of Health, Education, and Welfare, DHEW Publication No. (HSM) 73-9035, 1973. 180p. Engl. 141 refs.

The problems of supplying mental health services to rural areas of the USA and the involvement of the National Institute of Mental Health (NIMH) in their solution are examined. The text is composed of studies of rural life and mental health, including demographic and epidemiological studies, approaches to service based on hospital and community resources, five case histories of rural mental health centres in the USA, programmes for state hospitals with rural patients, and programmes for supplying manpower to meet rural needs. The NIMH's involvement in many of these programmes is described. (RMB)

5649 **Shumacker, H.B.** *Health in the People's Republic of China. Part 3.* Journal of the Indiana State Medical Association (Indianapolis), 73(9), Sep 1980, 570-573. Engl.

This article, the last in a 3-part series on health care in the People's Republic of China, deals with a variety of topics, including: medical education (including the training of paramedicals), the effects of the Cultural Revolution, the inadequate facilities for research, modes of payment for health care, and, in some detail, acupuncture. The author feels that much has been accomplished in a short time; a relatively new type of health regime has been introduced while the old one has been preserved. He cautions, however, that a medical system cannot be transplanted and that the techniques employed by the Chinese must be adapted to prevailing conditions if they are to prove beneficial. (DP-E)

5650 **Solomons, N.W., Butte, N.** *View of the medical and nutritional consequences of the earthquake in Guatemala.* Public Health Reports (Rockville, Md.), 93(2), Mar-Apr 1978, 161-169. Engl. 9 refs.

A physician and nutritionist who lived through the 1976 earthquake in Guatemala describe some of the medical and nutritional issues associated with the aftermath. International aid poured in from 35 countries to help Guatemala recover. An emergency field hospital was set up and its staffing and procedures are discussed. An emergency kitchen cooked and served food supplied by aid organizations and provided milk for infants whose mothers claimed their own had dried up. Measures were taken to avoid anticipated diarrhea and measles epidemics. The health situation in Guatemala since the earthquake is examined. (DP-E)

5651 **Soto Padrón, F., Suárez Rosas, L., Prías Barros, M.B.** *Estomatología en la comunidad; posibilidad de su aplicación experimental en un área de salud del Regional Boyeros en la provincia de la Habana. (Stomatology in the community; the possibility of its experimental application in a health area in the Boyeros region of the province of Havana).* Revista Cubana de Estomatología (Havana), 12(1-2), Jan-Aug 1975, 25-29. Span.

This paper describes a model for stomatology practice in the community that has been developed in accordance with the Cuban philosophy and organization of health services. Teams consisting of a dentist, a dental technician, and a dental assistant are to assume responsibility for the dental health and education of 1000 persons, seeking them out in their homes for diagnosis and referring them to a higher level of attention when necessary. The information gleaned through the community diagnosis will form the basis for orienting the dental curriculum. The model is to be pilot tested in Wajay Area, Boyeros Region, Havana Province. (HC-L)

5652 **Terris, M.** *Three world systems of medical care: trends and prospects.* American Journal of Public Health (New York), 68(11), Nov 1978, 1125-1131. Engl. 29 refs.

Three basic systems of medical care predominate in the world today: public assistance (108 developing countries), health insurance (23 industrialized capitalist countries), and national health service (14 countries, of which 9 are socialist). This paper describes the characteristics of these systems and considers current trends and the prospects of transition from one system to another. (DP-E)

5653 **University of Hawaii, Honolulu.** *Health in Ethiopia.* Honolulu, Hawaii, University of Hawaii, School of Public Health, International Health Program, Comparative Public Health Systems, Monograph No. 3, May 1974. 137p. Engl. 63 refs.

The Ministry of Public Health in Ethiopia is responsible for administering, planning, developing, and supervising health services, hospitals, and health centres. The major activities carried out in health centres, which are staffed by teams of health workers, include maternal child health services, environmental health, communicable disease control, and collection of health statistics. The major health problems are: famine due to inadequate food supplies; the need for health care facilities, particularly in the rural areas; and the lack of a well-established data collecting system. The contribution of international aid is discussed. Statistical data are included. (AF)

5654 **USA, Department of Health, Education, and Welfare.** *Building a rural health system.* Rockville, Md., US Department of Health, Education, and Welfare, Public Health Service, Health Services Administration, Bureau of Community Health Services, 1976. 20p. Engl.

Guidelines are provided by the US Public Health Service for the establishment of rural health systems. The main factors to be considered are need, feasibility, existing health care sources, and linkages. Requirements are outlined for primary, secondary, and tertiary care and emergency health services. Seven model systems are described, including: a free-standing, community-owned and -operated centre; a community-based corporation operating satellite centres; a community-based centre backed up by a hospital; two types of hospital-based centres; a hospital-operated satellite centre; and a hospital converted to a centre. (DP-E)

5655 **Valladares G., R.** *Cobertura de los servicios generales de salud en áreas rurales y sus relaciones con los programas de malaria. (Coverage of general health services in rural areas and their relation to the malaria programmes).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 85(5), Nov 1978, 442-45x11. Span.

Grupo de Estudio sobre el Control de la Malaria en las Américas, Washington, D.C., 12-15 Apr 1977.

Both administrators of general health services and malariologists agree that malaria control should be integrated into the general health services. This paper sets forward the tasks that may be delegated to the general health services according to the Ninth Report of the Expert Committee on Malaria and discusses some of the obstacles to this reorganization. Flexibility in the administration of malaria control, which should combine vertical and horizontal approaches according to circumstances, is advocated. (HC-L)

5656 **WHO, Geneva.** *Promoting environmental health in the years 1978-1983.* WHO Chronicle (Geneva), 33(5), 1979, 169-173. Engl.

Also published in French, Russian, and Spanish.

WHO's environmental health programme for 1978-1983 gives priority to the provision of water supply and sanitation in rural areas, the assessment of the adverse effects on human health of chemicals in the environment, and control of the pollution and contamination of air, water, food, and land. The main programme is broken down into four component programmes covering environmental health planning and management, basic sanitary measures, recognition and control of environmental hazards, and food safety. The principles and objectives of each of the component programmes are presented and discussed. (DP-E)

5657 **Williamson, J.D., Danaher, K.** *Self-care in health.* London, Croom Helm, 1978. 216p. Engl. Refs.

In developed societies, more than 75% of all health and medical care is through self-care, using simple but effective and safe remedies that have been produced by the pharmaceutical industry or prepared by the people themselves. This book examines the issue of self-care in national, economic, and personal terms, pointing out areas of conflict and the limitations of current knowledge. Separate chapters treat the health services and self-care, people in illness, self-care in illness, self-care in health, the establishment of self-care policy, and self-care and professionalism. Appendices list further readings and self-care manuals and there are a page of useful addresses and an index. Some statistical data are included. (RMB)

II.3 Planning

See also: 5617, 5654, 5882, 5952, 5967, 6081.

5658 **Alberman, E.** *Prospects for better perinatal health.* Lancet (London), 1(8161), 16 Jan 1980, 189-191. Engl. 8 refs.

This article describes worldwide problems of perinatal mortality in terms of international and within-country comparisons and discusses causes of mortality and planning of obstetric and neonatal services. Examples are taken from the People's Republic of China, Nigeria, Australia, Sweden, and the UK. The relationships between low birth weight, congenital malforma-

tions, and infant mortality are examined. Statistical data are included. (RMB)

5659 **Banerjee, N.** *Draft on national health policy.* Journal of the Indian Medical Association (Calcutta, India), 71(3), 1 Aug 1978, 71-77. Engl.

Health policies for India with regard to drugs, medical education, and rural health care are proposed. The 1st section deals with extended drug coverage, production, self-sufficiency, multinational firms, drug price reduction, pharmacy training, the revision of the national formulary, and research, development, and quality control. The medical education policy covers undergraduate training, rural-oriented training, teachers, training in allied health professions, and paramedical training. Broad outlines for a rural health care policy are presented in the last section. (DP-E)

5660 **Bennett, F.J.** *Primary health care and developing countries.* Social Science and Medicine (Oxford, UK), 13A(5), Aug 1977, 505-514. Engl. 55 refs.

Primary health care has been established as the avenue that most developing countries will explore in the next 20 years to improve the quality of life and health. This commitment is largely the result of the Alma Ata Conference, which clarified many of the political, technical, social, administrative, and educational aspects of primary health care. This paper summarizes this process of consolidation of the concept, gives examples of national plans from the Sudan, Tanzania, Ghana, India, and Southeast Asia, and deals with the types of support that facilitate community participation. Because primary care involves people and not just technology, the role of the social sciences needs greater emphasis. (Modified journal abstract)

5661 **Bossert, T.** *Health policies in Africa and Latin America: adopting the primary care approach.* Social Science and Medicine (Oxford, UK), 13C(2), Jun 1979, 65-68. Engl.

This article examines the problem of why and how governments adopt or fail to adopt the primary care approach to health care delivery from several different perspectives, including the international arena, economic and social restraints, regime and institutional characteristics, and development projects. Recommendations for changing health policy are also reviewed, leading to the conclusion that more research into the process of policy-making is needed. (Modified journal abstract)

5662 **Butz, W.P., Habicht, J.P.** *Effects of nutrition and health on fertility: hypotheses, evidence, and interventions.* Santa Monica, Cal., Rand Corporation, Rand Paper Series, Jul 1976. lv.(unpaged). Engl. Refs.

The authors first examine the biological effects of health and nutrition on fertility and fecundity, including factors affecting the ages of menarche, menopause, and death. Certain behavioural factors such as level of education and socioeconomic status also affect individual and family attitudes to nutrition and health, which then affect fertility. These various causal links are organized into a simple integrated model capable of predicting changes in fertility resulting from changes in nutrition and health status. The model can be used to help choose the most appropriate health, nutrition, and family planning services. (FM)

5663 **Colle, R.D.** *Communication for paraprofessionals, participation, and prevention.* Development Communication Report (Washington, D.C.), 27, Jul 1979, 2-3. Engl.

Communications can play a key role in the support of three important areas of effort in the primary health programmes of developing nations: the use of auxiliary health workers, community participation, and preventive health measures. Training by means of appropriate and imaginative teaching materials and support (often in the form of continuous in-service training) are the major contributions of communications to the utilization of health auxiliaries. Community participation can be encouraged by health education via the mass media, especially the radio, which is also an important tool for educating the public about preventive medicine. (DP-E)

5664 **de Sweemer, C.** *Community, communication, and the health practitioner.* Development Communication Report (Washington, D.C.), 27, Jul 1979, 1, 3. Engl.

The principles of primary care are discussed, some practical examples given, and the issues of communications and their importance in training primary health care workers examined. Like other development efforts, primary health care in developing countries depends heavily on three patterns of communication: lateral, centre to periphery, and periphery to centre. Because of their supportive role, the mass media merit special consideration as a subsidiary pattern. These three patterns are important in the training of both professional and auxiliary primary health care practitioners, who above all must be well versed in the use of simple techniques to teach new knowledge and behaviour. (DP-E)

5665 **Dutt, P.R.** *Rural health care in India at cross roads.* Indian Journal of Public Health (Calcutta, India), 22(4), Oct-Dec 1978, 292-302. Engl. 13 refs.

India's primary health care programme is criticized for its failure to meet the expectations of the people, its inability to provide adequate geographical coverage with reasonably good quality service, and its inferior planning and management, especially with regard to family planning. Suggestions are made for improving the health services infrastructure and administration.

These include setting realistic goals for each programme and each group of workers, upgrading the quality of supervision, improving training in health management and decision-making, and clarifying the responsibilities of each member of the health team. (DP-E)

5666 **Dutta, G.P.** *National health policy.* Journal of the Indian Medical Association (Calcutta, India), 71(3), 1 Aug 1978, 66-70. Engl.

The author, a representative of the Indian Medical Association, suggests principles for formulating a national health policy and a comprehensive rural health plan. These principles include: recognizing health care as an individual right; recognizing the link between health services and increased production; integrating health planning with development planning; involving every stratum of society in health care; reorienting medical education; coordinating the activities of national, regional, and local organizations involved in health, etc. Any effective national health system will emphasize mobile health units, family planning, school health, community participation, the use of auxiliary health workers, etc. (DP-E)

5667 **Elliot, V.** *Skills required for appropriate technology in health.* Tropical Doctor (London), 9(3), Jul 1979, 143-144. Engl.

This article explores some reasons why a commitment to appropriate health technology requires medical specialists to work closely with specialists in other fields. In health, an appropriate technology is one that is both economically viable and adaptable to local social and cultural circumstances, recognizes that there are alternative ways of achieving a given product, enhances the self-respect and self-confidence of its users, and is cost-effective in societal rather than purely economic terms. While the hardware for appropriate technology has existed for years, the software to meet the above-mentioned conditions does not. Its development will require cooperation between medical personnel and others skilled in management, planning, education, promotion, etc. (DP-E)

5668 **FitzPatrick, M.S.** *Environmental health planning; community development based on environmental and health precepts.* Cambridge, Mass., Ballinger, 1978. 264p. Engl. Refs.

Following an introductory chapter describing the need for community planning based on health and environmental concerns, the author presents a comprehensive approach to planning. It includes a systematic process of gathering, analyzing, and applying information to make the best use of scarce resources. The criteria involved in implementing the planning process and in evaluating projects are also described. The author then uses this method to analyze 10 new communities in the USA, showing that most of them do not meet environmental planning criteria. The concluding chapter calls for recognition of environmental health planning as an alternative planning approach. (FM)

5669 **Gunaratne, V.T.** *Challenges and response; health in South-East Asia region.* New Delhi, Tata McGraw-Hill, 1977. 248p. Engl. Refs.

The author covers the major current issues concerning health care in Southeast Asia. Section 1 deals with planning, giving priority to rural and family health, family planning, and the integration of traditional medicine. Part 2 discusses the prevention and control of infectious diseases, including smallpox, malaria, tuberculosis, cholera, and leprosy. Non-communicable diseases, such as cancer, heart disease, diabetes, etc., are covered in part 3. Part 4 examines health manpower development. Environmental health is discussed in part 5, while part 6 reviews activities in biomedical and immunological research. Final chapters cover such topics as nutrition programmes, child health, hospital administration, and health education. (FM)

5670 **Holland,W.W., Ipsen, J., Kostrzewski, J. ed(s).** WHO, Copenhagen. International Epidemiological Association, Geneva. *Measurement of levels of health.* Copenhagen, WHO, WHO Regional Publications, European Series No. 7, 1979. 456p. Engl. Refs.

For the purposes of this book, which is intended for health planners and policy-makers, measurement of levels of health includes the incidence and prevalence of specific diseases and physical and mental conditions as well as the social function of individuals and groups and their attitudes toward health and health-related activities. Demographic phenomena and the availability and utilization of health services are also considered. Measurable variables examined in different sections include ill health, need and demand for medical care, use of health services, and effectiveness and efficiency of health services. An attempt is made to develop a broader range of tools for health indicators than those presently available. Statistical data are included. (RMB)

5671 **Hughes, C.C.** Nebraska Comprehensive Health Planning Agency, Lincoln, Neb. *Development of a model health care delivery system for Nebraska: final report.* Springfield, Va., National Technical Information Service, 15 Mar 1973. 2099p. Engl. Refs.

The findings in this report, which resulted from the assessment of current health care delivery systems, were developed through vigorous data collection and systems analysis and form the basis for recommendations concerning the design of a model health care system for Nebraska (USA). Data are presented on health care facilities, health manpower, health financing methods, health care services, and demographic parameters. In a departure from the usual planning approach, six state-wide committees were organized and functioned in parallel with a health system group. The functions of each committee are outlined in the report. (Modified journal abstract)

5672 **King, M.H., Martodipoero, S.** *Health microplanning in the developing countries: a systems approach to appropriate technology.* International Journal of Health Services (Westport, Conn.), 8(4), 1978, 653-664. Engl. 15 refs.

A method of systematically planning the technical details of personal health care in the developing world is described. In contrast to traditional national health plans (macroplans), those for health technology have to be minutely detailed (microplans). A microplan is defined as an integrated set of components (instructions for technologies, equipment lists, teaching aids, evaluation instruments, etc.) prepared nationally to support a particular health care subsystem. A microplan can be applied to induce change and so improve the technical quality of existing services, to train new workers, and to tie educational programmes to service needs. Since the technology for dealing with disease is so similar all over the developing world, once a "master microplan" for a particular subsystem has been prepared, it can be readily adapted to the needs of individual countries. (Modified journal abstract)

5673 **Kleczkowski, B.M., Pibouleau, R. ed(s).** WHO, Geneva. *Approaches to planning and design of health care facilities in developing areas. Volume 3.* Geneva, WHO, WHO Offset Publication No. 45, 1979. 149p. Engl. Refs.
See also entries 2964 (volume 5) and 4487 (volume 7) for volumes 1 and 2.

This is the 3rd publication in a WHO series designed to assist those concerned with the planning, programming, building, staffing, and operation of health care facilities in developing countries. Separate chapters discuss the design and operation of inpatient areas, the outpatient departments and ambulatory services, the minimum requirements for surgery, radiology in basic care hospitals and clinics, the equipment required for hospitals and other health care facilities in developing countries, and the use of mobile and transportable health facilities in developing countries. This volume also contains a tentative synoptic table of topics to be covered in the series as a whole. (AF)

5674 **Kumar, V., Chhuttani, P.N.** *Some points for consideration in framing a national health policy.* Journal of the Indian Medical Association (Calcutta, India), 71(3), 1 Aug 1978, 64-65. Engl.

Fourteen suggestions for solving India's health planning problems are put forth. These include total government support of a national health policy, delegation of greater powers to village committees, appropriate deployment of resources, assigning specific areas of responsibility to medical colleges, implementing a programme of continuing education, involving physicians in the planning process, establishing functional referral services, expanding medical education, encouraging self-help movements, revitalizing the family planning programme, etc. (DP-E)

5675 **McKendrick, J., Christie, D.** *Aboriginal population of Victoria.* Medical Journal of Australia (Sydney), 1(5), 25 Mar 1978, 319-320. Engl.

The basis of epidemiological studies and health services planning is accurate enumeration of the population at risk. With regard to the Aboriginal population of Victoria (Australia), there was reason to believe that official census statistics were inaccurate. Interviews were carried out with representatives of Aboriginal organizations, state and federal government departments concerned with Aboriginal affairs, and other interested individuals. The best estimate of the Aboriginal population of Victoria arrived at by this method was almost double the census figure. Underestimation was most marked in rural areas. (Modified journal abstract)

5676 **Oficina Sanitaria Panamericana, Washington, D.C.** *Extensión de cobertura de los servicios de salud con las estrategias de atención primaria y participación de la comunidad. (Extension of health services coverage using primary care and community participation strategies).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 83(6), Dec 1977, 477-503. Span.
Cuarta Reunión Especial de Ministros de Salud de las Américas, Washington, D.C., 26-27 Sep 1977.

In order to help member countries to assess their health needs and to devise strategies to meet them, three PAHO study groups worked on the production of this document, which defines and elucidates the following key concepts: integral development, health services coverage, health needs, availability of health services, accessibility of health services, primary health care, community participation, appropriate technology, health services systems, and health manpower development. (HC-L)

5677 **OMS, Brazzaville.** *Politique sociale et développement sanitaire en Afrique: éducation et information pour la santé en Afrique; documents de travail et rapports finals des discussions techniques des 28e et 29e sessions du Comité régional de l'OMS pour l'Afrique. (Social policy and health development in Africa: education and information for health in Africa; working documents and final reports of the technical discussions of the 28th and 29th sessions of the WHO Regional Committee for Africa).* Brazzaville, OMS, Cahiers Techniques AFRO No. 16, 1979. 68p. Fren.

The two working papers presented in the 1st part of this book deal, respectively, with the magnitude of the challenge of providing health for all (in Africa) by the year 2000 and the need for a social revolution in public health. The paper presented in the 2nd part discusses the relative merits of mass educational campaigns and the community health agent concept as

methods of health education. Each paper is followed by a report of the ensuing discussion. (HC-L)

5678 **Oyeddiran, O.O.** *Co-operation between the universities and government in the delivery of health care in rural areas.* Nigerian Medical Journal (Lagos), 8(4), Jul 1978, 394-397. Engl.

The health problems of African countries are many, but the worst is the severe limitation of resources in terms of trained manpower, money, and materials. These constraints compel mutual cooperation between universities and governments in order to combat the causes of morbidity and mortality and improve the health status of the rural population. The scope for cooperation includes the definition of problems and objectives, ordering of priorities, planning of strategy, training of personnel, and delivery of health care. Some of the possible forms of cooperation are identified and discussed, such as the need for health education, systems for collecting and processing vital statistics, the linking of health care delivery with agricultural programmes, and the involvement of traditional healers. (DP-E)

5679 **Pan American Health Organization, Washington, D.C., USA, Department of Health, Education, and Welfare.** *Strengthening information services for health planning; report of a working group on mechanisms for improving the international exchange of health planning information:* Washington, D.C., Pan American Health Organization, 1978. 1v. (various pagings). Engl.

Working Group on Mechanisms for Improving the International Exchange of Health Planning Information, Bielefeld, Germany FR, 13-15 Jun 1978.

Unpublished document.

The discussions presented in this report focus on four recurring themes. In outlining the present state of information processing and transfer in health planning, participants contributed summaries of their current activities. A 2nd theme was concerned with the scope and coverage of health planning information services. Definitions and standardization of terminology are needed. The group then examined cooperative measures such as bilateral exchanges of information and the compilation of abstracts and bibliographic data files. Upgrading of existing services is preferable to the creation of a new centre. Finally, an operational plan was drawn up, establishing a network to facilitate such international transfer of health planning information. (FM)

5680 **Paul, T.M.** *Equal health care for all.* Journal of the Indian Medical Association (Calcutta, India), 71(3), 1 Aug 1978, 78-81. Engl.

Despite their well-publicized dissatisfaction with the Western medical system and its failure to serve the rural population, Indian health planners and government officials are the 1st to take advantage of the services Western medicine has to offer. To combat this blatant inequality, the author makes several recommendations for national planning. These include: increased emphasis on health education and population control; 1-year training of community health workers in immunization, nutritional health, environmental health, and family planning; subsidizing doctors who serve in rural areas; a fee-for-service form of health care delivery staffed by self-supporting doctors; and a reorganized system of medical education. (DP-E)

5681 **Roemer, M.I.** *Rural health programs of different nations.* In Roemer, M.I., Health Care Systems in World Perspective, Ann Arbor, Mich., Health Administration Press, 1976, 169-175. Engl.

For complete document see entry 6010; originally published as "Health Care for Rural People", Rural and Appalachian Health, Springfield, Ill., Charles C. Thomas, 1973, 65-78.

Eight approaches to the solution of rural health problems that are applicable in many different nations are discussed. These approaches include: disease prevention, with emphasis on maternal child health and environmental health; getting doctors to the rural areas by legislation or a variety of inducements; the use of auxiliary health workers; the establishment of rural hospitals and health centres; improved transportation and communications; quality promotions and maintenance, especially continuing education for rural health workers, which is usually accomplished by regionalization; economic support; and health services planning and coordination. (DP-E)

5682 **Ruffino-Netto, A., Ribeiro Arantes, G.** *Modelo matemático para estimar impacto epidemiológico da vacinação BCG. (Mathematical model for estimating the effectiveness of BCG vaccination).* Revista de Saúde Pública (São Paulo, Brazil), 11(4), 1977, 502-509. Portuguese. 12 refs.

A mathematical model has been designed to estimate the impact of vaccinating a specific age group with BCG on the incidence of tuberculosis in the age group immediately following over a certain number of years, taking into account vaccination coverage and effectiveness. The model is considered to be particularly useful in determining the lowest coverage required to maintain a cost-benefit ratio of greater than one, cost being the vaccination programme and benefit being the treatments avoided. An example of the application of the model in São Paulo, Brazil, is included. (HC-L)

5683 **Scotney, N.** *Evaluation of health education.* AFYA (Nairobi), 13, Jan-Feb 1979, 24-30. Engl.

Originally published as chapter 15 in entry 1933 (volume 3).

Points to be considered in evaluating a health education programme are discussed. These include fitting the assessment proposals to the programme, planning the assessment before the programme is launched, measuring the most significant changes, measuring less obvious but related changes, including a control group, allocating a reasonable proportion of the programme's resources to evaluation, bringing in an outside expert, using precise measurements, the possibility of using evaluation as a threat, and not being intimidated by the difficulties of evaluation. A note on health education research is included. (DP-E)

5684 **Selwyn, B.J.** *Studies of the health services and the community for planning and evaluating ambulatory care.* Contact (Geneva), 48, Dec 1978, 2-7. Engl.

This paper describes a method that can be used to survey the users and non-users of a health care system. The project that served as a basis for this model concentrated on government outpatient services in an urban area of Colombia. The section concerning methods covers the study's objectives, factors studied, the study area and population, the study design, sampling methods, information collection methods, and data processing. The results comprise general observations on the sampling results and information provided by health service user data and community survey data. (DP-E)

5685 **Sinha, A.K.** *National health planning and medical education (an exercise in futility).* Journal of the Indian Medical Association (Calcutta, India), 71(3), 1 Aug 1978, 57-61. Engl.

After examining some of India's medical education and physician distribution problems, the author outlines eight steps that he feels the government should incorporate into national health planning. These are as follows: accurate surveys of available medical manpower and their distribution, including traditional practitioners; spending at least 10% of the national budget on health; complete nationalization of the health services; proper staffing of the medical schools; a realistic doctor:patient ratio of 1:4 000; increased training of nurses, pharmacists, compounders, dentists, and paramedics; using auxiliaries only in health education and sanitation work; and implementing an amended national health scheme. (DP-E)

5686 **Thapar, S.D.** *Health and development; development plan for Naujhil Block, Mathura District, Uttar Pradesh.* New Delhi, Association of Voluntary Agencies for Rural Development, Avard Micro Level Planning Studies, No. 8, Jun 1977. 152p. Engl.

As part of a series of planning documents aimed at the block, a basic political unit of India, this volume broaches the subjects of health and (mainly agricultural) development. After the concept of development is discussed in chapter 1, chapter 2 sets forth a proposal for a community health service, including the design of the infrastructure, a training programme, staffing patterns, and a budget. Additional chapters cover dimensions of agricultural extension work, a scheme for irrigation saturation, the strengthening of animal husbandry, a selected socioeconomic infrastructure, industrial opportunities, development administration and overall project costs, and the impact sheet (a means of evaluation). Statistical data are included in the text and in the appendices. (DP-E)

5687 **UNICEF/WHO Joint Committee on Health Policy, Geneva.** *National decision-making for primary health care.* Geneva, WHO, 1981. 69p. Engl.

The adoption of the primary health care (PHC) approach to health services delivery involves major social transformations: first, recognition that the sources of ill health lie in the socioeconomic fabric of a nation; second, political commitment to addressing the relevant issues through intersectoral planning; and third, the diversion of funds from urban and hospital services to the core PHC activities. This report examines the scope of change attempted and achieved by six countries that are politically committed to the implementation of PHC: Papua New Guinea, Yemen, Finland, Mozambique, Burma, and Mali. It is hoped that their experience will contribute to the formulation of policies for international cooperation through UNICEF and WHO. (HC-L)

5688 **Union Internationale d'Education pour la Santé, Genève.** *Education sanitaire et politique de santé dans la dynamique du développement. (Health education and development policy).* Geneva, Revue International d'Education pour la Santé, 1977. 86p. Fren.
Neuvième Conférence Internationale d'Education pour la Santé, Ottawa, Canada, 29 Aug-3 Sep 1976.

This report summarizes the main topics discussed at the conference on health education and development policy, outlines the agenda, and presents the introductory and closing speeches. The 1st section discusses the role of health policy and programmes in social and economic development. Section 2 examines new trends in the organization of health services and their influence on health education planning. Section 3 covers the influence of health education on environmental health and on life style modification. The final section studies new developments in health education and the changing roles of educators and other health personnel. (FM)

5689 **Vargas, R.** *Health policies in Latin America.* Social Science and Medicine (Oxford, UK), 13C(2), Jun 1979, 69-73. Engl.

The 3rd special meeting of the Ministries of Health in the Americas in 1972 approved the Ten Year Health Plan for the Americas. This new approach to health policies emphasized the extension of coverage to previously underserved populations. This international

commitment, reaffirmed in 1977, was reflected in the firm decisions of each government to carry out strategies involving the provision of primary health care, community participation, reform and restructuring of health services organization and administration, differentiation of levels of care and regionalization, and development of physical, financial, and human resources. (Modified journal abstract)

5690 **Viedma, C.** *Worldwide challenge.* World Health (Geneva), Apr 1979, 20-23. Engl.
Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

The health and social problems of the elderly in developing countries are examined. A US study has shown that old age is better for those who have an adequate income, a better education, and a chance to keep on working. Since this is hard enough to achieve in developed countries, it is no wonder that developing countries find it almost impossible, especially since most of them have no sort of social security or retirement pension scheme. The need for social services for the aged was recently discussed at a WHO conference. (DP-E)

5691 **Vieira Matos, A.** *Assistência primária de saúde; implicações para a enfermagem. (Primary health care; implications for nursing).* Revista Brasileira de Enfermagem (Rio de Janeiro, Brazil), 31(1), Jan-Mar 1978, 13-22. Portuguese. 13 refs.

This paper discusses the implications of primary health care, as developed by WHO and applicable to Brazil, for the nursing profession. Since the nurse's role within the primary care system is likely to include some 1st line activities, the training and supervision of auxiliary personnel, etc., it is suggested that the curriculum be modified accordingly. Steps to be taken toward this end are recommended. (HC-L)

5692 **Vuori, H.** *Use of automated health information system in the management and planning of health services.* Public Health (London), 91(1), Jan 1977, 33-43. Engl. 36 refs.

The term "health information system" is often used without a clear definition of its objectives, components, and area of application. This paper reviews the types and major uses of systems designed for collecting, processing, analyzing, and distributing information required for organizing and operating health services. Theoretical considerations based on information theory, systems theory, and the prevailing planning ideology for the development of the data bases of such systems as well as practical guidelines for the inclusion of specific data items into the data bases are presented. (Modified journal abstract)

5693 **WHO, Copenhagen.** *Constraints in mental health services development; report on a working group.* Copenhagen, WHO, 1978. 34p. Engl.
Working Group on Constraints in Mental Health Services Development, Cork, Ireland, 28 Jun-1 Jul 1977.
Also published in French and Russian.

This WHO working group met to consider problems in community mental health care posed by attitudes, information, manpower, material resources, coordination, and administration and policy. Position papers from Algeria, Belgium, France, Germany, Greece, Hungary, Ireland, Italy, the Netherlands, Norway, Poland, Portuga' Romania, Sweden, Turkey, the UK, and the USA s reviewed. The group's conclusions and recommendations are presented. Annexes contain the agenda and a list of participants. (RMB)

5694 **WHO, Geneva.** *Formulating strategies for health for all by the year 2000; guiding principles and essential issues.* Geneva, WHO, 1979. 59p. Engl.

These WHO guidelines are intended to provide a common framework that will help the participants in the Alma Ata Conference to formulate compatible national and international primary health care strategies. Separate sections cover: basic principles; formulating national policies, strategies, and plans of action; formulating regional strategies; formulating the global strategy; and the role of WHO. A timetable for formulating strategies is also presented. (DP-E)

5695 **WHO, Geneva.** *ACMR strengthens WHO's research commitments.* WHO Chronicle (Geneva), 32(8), 1978, 311-313.
Also published in French, Russian, and Spanish.

The 1978 meeting of the Advisory Committee on Medical Research (ACMR) examined various problems and priorities in health services research. The participants discussed the ethical aspects of WHO's research activities, research in human reproduction and tropical diseases, the neurological disorders programme, safety measures in microbiology, and the activities of regional ACMRs. Other issues covered included the dissemination of scientific information, support for WHO's research programme, and the development of the nutrition programme. (DP-E)

5696 **WHO, Geneva.** *Training in national health planning; report of a WHO Expert Committee.* Geneva, WHO, WHO Technical Report Series No. 456, 1970. 59p. Engl.
WHO Expert Committee on Training in National Health Planning, Geneva, Switzerland, 24 Nov-2 Dec 1969.

Over the past few years, increased importance has been attached to the development of national health plans as an integral part of economic and social development. This report discusses the characteristics of a national health planning system and the roles and training requirements of the various personnel involved in it. Particular emphasis is placed on the generalist health planner—the leader of the health

planning team—and sample programmes for his or her training are appended. (HC-L)

II.4 Geographical Distribution of Health Services and Workers

See also: 5617, 5624, 5902, 6026, 6027.

5697 **Abdussalam, M.** *Problems of health manpower in developing countries.* WHO Chronicle (Geneva), 30, 1976, 455-459. Engl.

Also published in French, Russian, and Spanish. After examining the reasons why health manpower, with special reference to Pakistan, is commonly thought to migrate from developing to more developed countries, the author discusses some additional factors that are not generally taken into consideration: the lack of economic capacity in poorer nations to employ all the health workers they train, the lack or imbalance of support personnel such as nurses, poor planning, and medical education based on the Western model that has little relevance to the problems of developing countries. The effects of migration and some solutions are also considered. (RMB)

5698 **Alhady, S.M.** *History and development of surgery in Malaysia.* Australian and New Zealand Journal of Surgery (Sydney), 48(4) Aug 1978, 352-356. Engl.

The history of surgical services, mainly in terms of the foundation of hospitals, in Malaysia is traced. The development of general surgery, the period of transition between World War II and independence, and the development of surgical specialization are examined. Statistical data on the incidence of ulcers in Kuala Lumpur are included. (DP-E)

5699 **Blackmon, D.** *Rural health care.* Alabama Journal of Medical Sciences (Birmingham, Ala.), 16(1), Jan 1979, 60-66. Engl. 37 refs.

In Alabama (USA), 39.5% of the population live in rural areas, most of them medically underserved. Efforts to bring health care to these areas have included: physician incentives, such as payment of tuition or exemption from military service; the use of paraprofessionals, mostly physician's assistants and nurse practitioners, who are linked to physicians in a variety of ways; and prepaid health insurance schemes. In addition to poverty and communication and transportation difficulties, common problems are legal restrictions and the ineligibility of many rural residents for health insurance programmes. Current research needs are also examined. (DP-E)

5700 **Loefler, I.P.** *District surgeon.* Journal of the Royal College of Surgeons of Edinburgh (Edinburgh), 23(3), May 1978, 156-159. Engl.

The problems and personality conflicts confronting most doctors in rural or district hospitals are described. Since many of these hospitals still have only one doctor and the bulk of his work consists of surgery, the author prefers to call him a surgeon. Although most physicians shun district hospitals for a variety of reasons, the author feels that a number of steps could be taken to change this situation. He groups them under three headings: training, selection, and support. Training includes introducing more administrative skills into the medical curriculum, selection involves abolishing the one-doctor hospital and always having two or three staff physicians, and support provides reassurance for isolated doctors. (DP-E)

5701 **Texas Medicine, Austin.** *Approaches to rural health care delivery; a report by the TMA task force on access to medical care.* Texas Medicine (Austin), 75(2), 1979, 24-29. Engl.

A task force sponsored by the Texas Medical Association reports on a number of rural health programmes that have been successfully established in different parts of that US state. Solutions to rural health problems have included regional health services, group practices, effective transportation systems, and local clinics staffed by medical students, nurses, and paramedics. A major factor in each area has been a single person (often a pharmacist or a banker rather than a physician) or a group of concerned citizens who helped to organize and then supported the programme once it had been established. (DP-E)

5702 **Thompson, D.D., Weeks, D.** *Rural areas face woes in health care delivery, try model systems.* Hospitals (Chicago, Ill.), 53(13), 1 Jul 1979, 45-48. Engl.

This article reviews the current problems of the health care delivery system in the rural USA (poverty; lack of manpower, facilities, transport, etc.) and offers some possible solutions. Several model rural programmes—one based on primary care nurse practitioners, the others on regionalized services—are described. Any successful future models must incorporate at least some of the following elements: allied health personnel, more equitable distribution of resources, strengthening of local services and hospitals, and community awareness. (DP-E)

5703 **Widmer, E.** *Medicus Mundi—Beitrag einer privaten Hilfsorganisation für die Basisgesundheitsdienste der Dritten Welt. (Medicus Mundi—the contribution of a private cooperation organization to basic health services in the Third World).* Sozial- und Präventivmedizin (Zürich, Switzerland), 24(2-3), 1979, 201-203. German.

This article describes the organization, philosophy, and activities of Medicus Mundi. A neutral organization for cooperation in the health field, it was established in 1962 and has branches in Belgium, Germany, France, Holland, Spain, and Switzerland. Its principal activity is to provide developing countries with physicians and other health personnel; in January 1978, there were 400 physicians working under Medicus Mundi auspices. Its major objectives include the

equitable distribution of health care to all, the integration of health services in a global development policy, and the promotion of harmonious development emphasizing the worth of the individual and his community. It also serves as a forum for dialogue between private cooperation organizations and receiver countries. (Modified journal abstract)

II.5 Financial Aspects

See also: 5903.

5704 **Hein, H.A., Ferguson, N.N.** *Cost of maternity care in rural hospitals.* Journal of the American Medical Association (Chicago, Ill.), 240(19), 3 Nov 1978, 2051-2052. Engl.

When the US government suggested consolidation of obstetric services as a method of cost containment, in particular, the curtailment of maternity services in hospitals performing fewer than 500 deliveries annually, numerous questions were raised about the validity of this approach in rural areas. An Iowa survey of 129 hospitals (with 80% response) revealed that 81% of all hospitals with maternity services would be in violation of federal guidelines but that no substantial saving would be made if time and distance factors were taken into consideration. It is suggested that if federal plans would support the development of regional systems of perinatal care and education, the cost of obstetric services would be better controlled. (DP-E)

5705 **Luft, H.S.** *Poverty and health; economic causes and consequences of health problems.* Cambridge, Mass., Ballinger, 1978. 263p. Engl. Refs.

This book presents an empirical analysis of the interrelationships between poverty and health, which can be causal in both directions. The author outlines policies establishing financial and other incentives for behaviour change in the context of a system that internalizes the costs of health problems, so that the agency that pays for medical care and income transfers will have the incentive and power to pass some of those costs on to the responsible polluters and hazard creators. In some cases, taxes and insurance premiums can be used to have the costs borne by the appropriate party; in others, rather than having the consumer bear the brunt of both taxes and health problems, more direct measures may be taken, such as counteradvertising. Statistical data are included. (RMB)

5706 **Popkin, B.M.** *Some economic aspects of planning health interventions among malnourished populations.* American Journal of Clinical Nutrition (Bethseda, Md.), 32(12), Dec 1978, 1214-2323. Engl. 32 refs.

Three aspects must be taken into consideration when introducing a health intervention at the household level in a malnourished population: the degree of poverty and its effect on the feasibility of the intervention, the conflict between reaching the poorest groups as opposed to those who can pay, and the costs and benefits of the intervention as perceived by the target group itself. This paper discusses these aspects with reference to improving local water supplies. (HC-L)

5707 **Roemer, M.I.** *Social security for medical care in developing countries.* In Roemer, M.I., Health Care Systems in World Perspective, Ann Arbor, Mich., Health Administration Press, 1976, 235-240. Engl. 22 refs.

For complete document see entry 6010; originally published as "Social Security for Medical Care" in International Journal of Health Services (Westport, Conn.), 1(4), Nov 1971, 354-361.

After World War I, social insurance for medical care spread from Europe to the developing world. In these countries, however, the percentage of persons insured has typically been small, so that inequities are created relative to the larger uninsured population. Ministries of health, theoretically responsible for the health of the entire population (although actually concentrating most of their efforts on the poor), often look upon social security agencies as rivals, especially since the agencies often have more funds to spend on their relatively small number of subscribers. This paper examines the reasons why the social insurance approach is, in the long run, promotive of social and economic development as well as actually supportive of the objectives of the ministries of health. (Modified journal abstract)

5708 **Schweitzer, S.O. ed(s).** USA, Department of Health, Education, and Welfare. *Policies for the containment of health care costs and expenditures.* Washington, D.C., Department of Health, Education, and Welfare, Public Health Service, National Institute of Health, DHEW Publication No. (NIH) 78-184, 1978. 490p. Engl. Refs.

International Conference on Health Care Costs and Expenditures, Bethesda, Md., 26-28 Apr 1976.

Papers and country studies from Denmark, Israel, Switzerland, the USA, Belgium, France, Australia, the Netherlands, the UK, the Federal Republic of Germany, Canada, and Sweden were presented at the 1976 International Conference on Health Care Costs and Expenditures. Topics covered include the establishment of a framework for the study of containment measures, pricing and cost sharing, alternative approaches to the reimbursement of providers, utilization review programmes, the role of health planning, and alternative policies. This volume also contains a list of participants, an index, and an annotated bibliography. Many papers include statistical data. (DP-E)

II.6 Cultural Aspects

See also: 5624, 5864, 5868, 5876, 5923, 6033.

5709 **Asuni, T.** *Dilemma of traditional healing with special reference to Nigeria.* Social Science

and Medicine (Oxford, UK), 13B(1), Jan 1979, 33-39. Engl. 8 refs.

Because of the shortage of health workers in rural areas, it is often suggested that traditional practitioners be incorporated into organized health care services. The problems that any attempt to integrate these practitioners would pose in Nigeria are discussed. These include: the fact that Nigerian herbalists do not understand why and how their medicines work; the need for written records, which illiterate healers cannot maintain; and the possibility that formal training might interfere with the healers' ability to cure mental illness by relating to the patients' cultural background. (DP-E)

5710 **Buie, C.** *Non-technical considerations in health care delivery.* Bloomington, Ind., PASITAM, Documentation and Analysis Centre, PASITAM Design Notes No. 11, 1979. 2p. Engl.

Basic cultural matters such as perceptions of health and illness greatly influence the effectiveness of health care delivery projects and programmes. These matters cannot be fully understood from a technical perspective. However, it is not always necessary to replace these perceptions with objectively correct views to get people to behave as desired. When the possibility of syncretic (associative rather than logical) acceptance of new ideas and practices exists, it offers a way to deal with a culture other than trying to supplant traditional views with modern ones. An example from Ghana, where traditional midwives were trained in aseptic delivery techniques when local women refused to attend maternal child health centres, is given. (DP-E)

5711 **Carstairs, G.M.** *Challenges to counselling and psychotherapy from societies in rapid change.* Australian and New Zealand Journal of Psychiatry (Sydney), 12(4), Dec 1978, 209-213. Engl.

The author briefly examines the phenomenon of rapid modernization that has exacerbated the tension between the generations and eroded parental authority throughout the world. He then goes on to illustrate the continuing need for social support with reference to a village community in northern India and an English university. Assistance to troubled individuals was available, in the 1st case, from various traditional healers and, in the 2nd, from an informal network of concerned individuals. In either case, the role of the psychiatrist was to support, rather than supplant, such help-giving agents. (HC-L)

5712 **Durodola, J.I.** *Place of traditional medicine in modern medical practice in Nigeria.* Nigerian Medical Journal (Lagos), 8(4), Jul 1978, 308-311. Engl.

This article discusses the history of Nigerian traditional medicine based on the doctrine of signatures, which states that the medical use to which a plant can be put is determined by its colour, form, or shape. Using this doctrine, traditional practitioners acquired biological knowledge by trial and error. The need is stressed for the scientific investigation of traditional medicine to confirm the claims of traditional healers, investigate any patent agents that can effect reproducible healing, and advise against the use of plants containing toxic agents. (DP-E)

5713 **Genest, S.** *Mèdecine africaine et prospective: points de vue de l'anthropologue. (Outlook for African medicine: the anthropologist's point of view).* Quebec City, Université de Laval, 30 Mar 1978. 6p. Fren.
Unpublished document.

Anthropological investigation into traditional African medicine has shed considerable light on the social aspects of treatment and the definition of normal and pathological states; similar investigations applied to occidental medicine have led to the recognition of its limits and to the admission that traditional and modern systems might complement one another. It is suggested that African governments take the necessary steps to foster this complementarity at the institutional level. (HC-L)

5714 **Kao, F.F.** *Ethnomedicine, medicinal plant research and world medicine (editorial).* American Journal of Chinese Medicine (Garden City, N.Y.), 7(1), Spring 1978, 1-4. Engl.

This editorial calls for the codification, scientific investigation, improved utilization, and application of traditional medicine, in the countries to which it is indigenous, as a complement to modern medicine. It includes a set of guidelines for doing so; these outline requirements in terms of research manpower, research centres, and a research programme covering literature review and nomenclature, priorities in drug plant research, survey and cultivation of medicinal plants, processing of medicinal plants, clinical and scientific research, and an information centre. (HC-L)

5715 **Mitchnik, D.** *Role of women in rural Zaire and Upper Volta: improving methods of skill acquisition.* Geneva, International Labour Office, OXFAM Working Paper No. 2, Nov 1977. 36p. Engl Refs.

The author examines the status of women in rural communities in Zaire and Upper Volta, emphasizing employment patterns and labour utilization. Following a description of the daily activities of women in these areas, the author outlines current training programmes to promote health, nutrition, and home economics. Chapter 3 evaluates the adverse effects of agricultural development projects on the traditional work patterns of women. Chapter 4 offers suggestions for improving rural training programmes and chang-

ing policies for rural development. Chapter 5 stresses the need for training courses in non-farm occupations. The final chapter presents general conclusions and offers suggestions for further research. (FM)

5716 **Ngui, P.W.** *Psychological reactions in disease and their management.* Nursing Journal of Singapore (Singapore), 18(2), Nov 1978, 124-126. Engl.

This article examines a number of factors, including the traditional beliefs and cultural practices, that influence the illness behaviour of Chinese and Malay patients in Singapore. Factors determining individual response to illness can be classified into three groups: patient factors, illness and treatment factors, and situational factors. Patient factors include age, sex, race, society, culture, personality, and previous life experiences. The nature and severity of the symptoms, the site of the disease, and the investigation and treatment procedures are the most common factors in the 2nd group, while the 3rd comprises psychological factors in the patient's environment, medical treatment, and hospitalization. (DP-E)

5717 **Werner, R.** *Traditionelle Medizin und moderne Medizin—Kontradiktio oder Symbiose? (Traditional medicine and modern medicine—contradition or symbiosis?).* Öffentliche Gesundheitswesen (Stuttgart, Germany), 40(6), Jun 1978, 347-360. German.

The author emphasizes the importance of traditional medicine in developing countries. He outlines the major factors in the aetiology of disease as they relate to traditional treatment methods. Modern medicine must take these factors into account if treatment is to be successful. The interaction of modern drugs with traditional remedies is also discussed. The author calls for the upgrading of traditional practitioners and their integration into public health schemes. (FM)

5718 **Yee, T.T., Lee, R.H.** *Based on cultural strengths, a school primary prevention program for Asian-American youth.* Community Mental Health Journal (New York), 13(3), 1977, 239-248. Engl.

As Asian-American mental health workers in a community mental health centre where there is little being done to provide appropriate services to its Asian-American population, the authors felt a need to find effective mental health models for the unique cultural and linguistic characteristics of their people. The high school primary prevention programme described in this paper provides Filipino youth with a positive view of their cultural identity and a supportive place in which to examine how their cultural values differ from those of mainstream Americans. Recoginizing that ethnic minorities need to rely on their own subculture for the kind of psychological and social support required for mental health, the programme is aimed at mobilizing the strength and resources of the particular subculture. (Modified journal abstract)

5719 **Zaki Hasen, K.** *Effects on child mental health of psychosocial change in developing countries.* International Journal of Mental Health (White Plains, Ga.), 6(3), Fall 1977, 49-57. Engl.

Psychosocial changes, such as improved status of women, increased education, alterations in tribal structure, urbanization, and industrialization, have important implications for planning health and social services for children. It is suggested that unrestrained migration should be controlled, institutions should be developed to replace original structures such as the extended family and the tribal system, the educational needs of a developing country are greater than those of a developed country, and health workers and planners need to be closer in background and attitudes to the people they serve. (DP-E)

II.7 Epidemiological, Family Planning, Maternal Child Health, Nutrition and Disease Control Studies

See also: 5604, 5605, 5606, 5607, 5855, 5874, 5889, 5941, 5950, 5960, 5967.

5720 **Acuda, S.W.** *Use of psychiatric drugs in rural health centres, district and provincial hospitals.* East African Medical Journal (Nairobi), 54(8), Aug 1977, 438-444. Engl.

This article reviews 16 drugs used for the treatment of common psychiatric disorders encountered in East Africa, including indications and contraindications, dosages, and possible side effects. These drugs comprise major and minor tranquilizers, antidepressives, tricyclic antidepressants, and monoamine oxidase inhibitors. The drug treatment of alcoholism is also discussed. (DP-E)

5721 **Acuña, H.R.** *Problemas de las infecciones venèreas en Amèrica Latina y el Caribe y los medios para combatirlos. (Venereal diseases and their control in Latin America and the Caribbean).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 84(5), May 1978, 377-382. Span.

This article calls attention to the growing concern of the countries of Latin America and the Caribbean with the problem of venereal diseases. Three opportunities for improving prevention and control of the diseases are pointed out, namely: more efficient utilization of the systems of social security to be found in Latin America; the incorporation of venereal disease control within existing primary care services; and the inauguration of pilot projects in venereal disease control, such as that presently underway in St. Andrew's, Jamaica. (HC-L)

5722 **Addy, P.A.** *Vaccines and vaccinations in the under-fives in Ghana, a tropical developing country.* In Regamey, R.H., ed., Vaccinations in the Developing Countries, Basel, Switzerland, S.

Karger, Developments in Biological Standardization, Vol. 41, 313-320. Engl.
Fifteenth International Congress for Biological Standardization, Le Gosier, Guadeloupe, 16-20 Apr 1978.
For complete document see entry 5792.

Measles, poliomyelitis, tetanus, pertussis, and tuberculosis, while major causes of child mortality in Ghana, can also be prevented by immunization. Current immunization schedules are discussed in terms of immunological considerations, the half-life of acquired maternal antibodies, and epidemiological patterns. An attempt is made to justify Ghana's present immunization schedule. Problems in present underfive programmes include transport, refrigeration, health education for mothers to make them aware of the importance of immunization, and planning. (DP-E)

5723 **Ajao, O.G., Ajao, A.O.** *Ascariasis and acute abdomen.* Tropical Doctor (London), 9(1), Jan 1979, 33-36. Engl. 12 refs.

Generally, doctors in tropical countries refrain from treating rural patients who are only lightly infected with *Ascaris lumbricoides* on the grounds that reinfection is inevitable and the mild infection provides some immunity. This paper attempts to combat that misconception by highlighting the various potentially lethal surgical conditions that can be caused by ascariasis. These include intestinal obstruction, intussusception, intestinal perforation, appendicitis, inflammatory gall bladder disease, volvulus, pancreatitis, and peritonitis. The authors suggest that all patients with vague, chronic abdominal pain be given preliminary antihelminthic treatment before expensive diagnostic tests are performed. (DP-E)

5724 **Aldighieri, R., Ratovo, L.** *Que faut-il penser de l'efficacité des conventions sanitaires internationales à propos de la pandémie contemporaine de choléra? (Are international sanitary conventions effective enough in the present cholera epidemic?).* Bulletin de la Société de Pathologie Exotique et de ses Filiales (Paris), 70(5), 1977, 459-467. Fren. Refs.

The present epidemic spread of cholera proves that nations are powerless to establish an intercoordination strong enough to bring under control problems of geographic diffusion and endemisation of new territories. The authors examine deficiencies in international health regulations on two levels. Epidemiological deficiencies include poor definitions and inappropriate investigation methods. Faults in the application of the regulations can be traced to political and economic factors. They conclude by recommending a reconsideration of the present system of international sanitary practices. (Modified journal abstract)

5725 **Bailey, W.S.** *Veterinary medicine and comparative medicine in international health; opportunities for improving human health and welfare in tropical countries.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 27(3), 1978, 441-465. Engl. 99 refs.

The author outlines the problems and proposes some solutions with regard to the links between veterinary medicine and human health in tropical developing countries. Four categories of need are specified: increase of food, fibre, and draft power by more effective control of animal diseases, which could save some 30 million tons of milk and 15 million tons of meat and eggs per year; more effective control of zoonoses; improvement of environmental health, especially food hygiene and control of animal waste; and expansion of knowledge of comparative medicine (human and veterinary). The author concludes by appraising the unrealistic definition of health proposed by WHO and outlines some more pragmatic targets for the future. (Modified journal abstract)

5726 **Baker, S.J.** *Subclinic intestinal malabsorption in developing countries.* Bulletin of the World Health Organization (Geneva), 54(5), 1976, 485-494. Engl. 97 refs.

Asymptomatic small intestinal disease characterized by abnormality of structure and function has been reported from many developing countries. Abnormalities of structure include changes in vullus architecture and in appearance under both the light and electron microscopes. Changes in function include abnormalities in the absorption of xylose, fat, vitamin B12, amino acids, and dipeptides and excessive fecal losses of nitrogen and energy. The aetiology of the condition is unknown but appears to be closely related to exposure to the environment. The nutritional consequences of this condition have not been fully explored but for people living on marginally sufficient dietary intake they may be extremely important. (Modified journal abstract)

5727 **Bang, F.B.** *Famine symposium—the role of disease in the ecology of famine.* Ecology of Food and Nutrition (London), 7(1), 1978, 1-15. Engl. 50 refs.

This survey of the role of disease in the ecology of famine emphasizes that the same factors that cause famine often lead to mass spread of infectious diseases as well. In most of the famines of which adequate records are available during the last 150 years (Ireland, India, Russia, Bangladesh, etc.), the resulting epidemics have killed as many people as starvation itself. The author points out the need for specific planning for disease prevention as an integral part of famine prevention. Statistical data are included. (DP-E)

5728 **Behar, M.** *Nutrition and child health.* World Health (Geneva), Feb-Mar 1979, 16-19. Engl. Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

This article examines ways of improving infant and child nutrition in developing countries. Suggested solutions include better antenatal nutrition for their mothers, increased emphasis on breast-feeding, the introduction of adequate supplementary feeding at the proper time, and more rational distribution of available resources. (DP-E)

5729 **Behar, M.** *Protein-calorie deficits in developing countries.* Annals of the New York Academy of Sciences (New York), 300, 1977, 176-187. Engl. 24 refs.

The author analyzes the causes of protein-calorie malnutrition (PCM), which, in addition to its manifestation as marasmus and kwashiorkor, affects large proportions of both the child and adult populations of developing countries as a subclinical chronic disease. The author maintains that the availability of food is not a major factor, but that disease and infection, physical activity, and social and environmental factors can contribute to PCM even when sufficient food is available. Recommendations for improving general nutrition levels include the provision of basic health services, proper infant weaning foods, nutrition education, and better environmental health and disease control. Examples from Guatemala are cited. (DP-E)

5730 **Behar, M., Viteri, F.** *Protein-calorie malnutrition.* Progress in Food and Nutrition Science (Oxford, UK), 1(2), 1975, 123-137. Engl. Refs.

Protein-energy malnutrition is reviewed with particular reference to: classification, including relative degree of calorie and protein deficiency, age, magnitude and duration, and nature and severity of concurrent diseases; effects of calorie deficiency and protein deficiency on the individual, especially when manifested as marasmus or kwashiorkor in children; epidemiology (environmental, agent, and host factors); treatment in emergency situations, by special nutrition programmes, and in the home; and methods of prevention. (DP-E)

5731 **Belavady, B.** *Nutrition in pregnancy and lactation.* Annals of the Indian Academy of Medical Sciences (New Delhi), 12(4), Oct-Dec 1976, 186-192. Engl.

This article examines the nutritional needs of pregnant and lactating women in India. Some of the problems of malnourished women from the lower socioeconomic groups are discussed. The cultural practice of prolonged breast-feeding should be encouraged by ensuring that lactating mothers have nutritionally adequate diets. Statistical data are included. (DP-E)

5732 **Berthet, E., Raimbault, A.M.** *Education nutritionnelle dans les communautés villageoises. (Nutritional education in rural communities).* Revue Internationale d'Education de la Santé (Geneva), 21, 1978, 62-65. Fren.

Only long-term projects such as water supply development and reforestation can offer permanent solutions to the problems of malnutrition and famine in developing countries. Meanwhile, much can be done at the village level in the area of nutrition education. By mobilizing five key local figures (the chief administrator, the agriculturalist, the sanitary agent, the teacher, and the public works officer), activities can be coordinated to improve agricultural production, water supply systems, sanitary facilities, and communication networks and to educate the population. The *Centre International de l'Enfance* in Paris has organized several seminars to guide such people in the planning and implementation of community programmes. (FM)

5733 **Brander, G.C., Elis, P.R.** *Control of disease.* London, Bailliere Tindall, Animal and Human Health Series, 1977. 136p. Engl. Refs.

This volume, the 1st in a series of four on animal and human health, treats these topics: new threats to animal and human health arising from intensive methods of animal production, rapid movement of man and animals, etc.; prevention, treatment, and control of communicable diseases; four models of control of communicable diseases (smallpox, influenza, rabies, and brucellosis); the interrelationship between host, agent, and environment; programme planning and evaluation; and strategies that will likely be required in the future. The need for regional and international cooperation in disease control efforts is strongly indicated throughout. (HC-L)

5734 **Burney, M.I., Wazir, Y., Lari, F.A.** *Longitudinal study of visceral leishmaniasis in northern areas of Pakistan.* Tropical Doctor (London), 9(3), Jul 1979, 110-116. Engl. Refs.

The epidemiology of visceral leishmaniasis in Baltistan, the northern area of Pakistan, is discussed. It was not possible to identify the species of sandfly responsible for transmission. The highest incidence of the disease was recorded in children, while the local adult population seems to be immune. Clinically, the disease is of a severe type with high mortality in spite of treatment. The clinicoepidemiological features of the disease have some characteristics in common with the Mediterranean type and others in common with Indian kala azar. (DP-E)

5735 **Castelazo-Ayala, L., Karchmer, S., López-García, R., Shor-Pinsker, V.** *Ginecología y obstetricia a través de los últimos treinta años. (Gynaecology and obstetrics during the last thirty years).* Gaceta Médica de México (Mexico City), 114(4), Apr 1978, 183-199. Span.

Bibliographical references relative to this article are available from the Oficina Editorial de la Academia Nacional de Medicina, Mexico City, Mexico.

This paper reviews advances that have been attained over the past 30 years in the understanding, control, and treatment of the female reproductive system. These are discussed under the following topics: endocrinological gynaecology; infantile, adolescent, and menopausal gynaecology; study and treatment of sterility; gynaecological infections and infestations; gynaecological surgery; pelvigenital abnormalities; cancer detection and treatment; physiology of pregnancy; obstetric pathology; systemic pathology complicating pregnancy; influence of the environment on the fetus; diagnostic methods in obstetrics; physiology of and pharmacology during labour; concept of fetal distress; caesarian section; perinatology; family planning; and a history of gynaecology and obstetrics as specialties in Mexico. (HC-L)

5736 **Centre National de la Recherche Scientifique, Paris.** *Ecologie des leishmanioses. (Ecology and leishmaniosis).* Paris, Centre National de la Recherche Scientifique, 1977. 334p. Engl., Fren. Refs.
Colloque International No. 239 du Centre National de la Recherche Scientifique, Montpellier, France, 18-24 Aug 1974.

The ecology of leishmaniasis is still imperfectly understood—variations in the biology of the parasite, the preference of the vector, and the human response have yet to be explained. In hopes of shedding some light on these questions—and of indicating areas for, and guidelines to, future research—this report gathers together papers presented at an international multidisciplinary conference under these headings: *leishmania* (parasites), vertebrate reservoir, sandfly vector, epidemiology, and prevention. Papers are reproduced in the original language with abstracts in English and French; the recommendations are presented in both languages. (HC-L)

5737 **Chand, M.** *Dietetics in Fiji.* Journal of the American Dietetic Association (Chicago, Ill.), 72(2), Feb 1978, 180-181. Engl.

To practice dietetics in Fiji, a dietician must have an understanding of the customs and languages of the islands' three main racial groups: Fijians, Indians, and Europeans. The 3-year course for dieticians, which is planned and supervised by the Department of Nutrition and Dietetics, Fiji School of Medicine, ensures that its graduates are able to meet the needs of the community. Problems of preparing tropical foods and specialized meals for hospitals and schools as well as in field situations are discussed. (DP-E)

5738 **Chishty, S.M.** *Epidemiological observations on the 1974 Hajj—"cholera epidemic" in Saudi Arabia.* Mikrobiologija (Moscow), 14(1), 1977, 81-84. Engl.

In this brief preliminary communication, the author describes the problems of communicable disease control in Jeddah, Mecca, Medina, Mina, and Arafat, Saudi Arabia, during the 1974 *Hajj* (the pilgrimage to Mecca). Cholera was not reported during the pilgrimage itself, but shortly afterwards a Lagos newspaper claimed that 300 Nigerian pilgrims had died from the disease and the Saudi Arabian health authorities eventually had to tighten control measures. Some of the measures taken are described and the difficulties of preventing such an outbreak under the prevailing conditions are considered. (Modified journal abstract)

5739 **Choudhry, A.W.** *Water pollution and its relation to disease.* AFYA (Nairobi), 12, Sep-Oct 1978, 145-147, 149. Engl.

Water can be polluted by human wastes, agricultural products such as fertilizers and pesticides, washings from the soil, or industrial wastes. The diseases that can be spread by water can be classified into water-borne, water-washed, water-based, and water-related vector-borne diseases. Water-borne diseases, such as typhoid, cholera, and poliomyelitis, are caused by organisms that live and multiply in water. Water-washed diseases are infections due to lack of water for personal hygiene, mainly skin and eye diseases. The schistosomiases are the main water-based diseases, in which larvae depend on aquatic snails. The major water-related vector-borne diseases are malaria, onchocerciasis, and filariasis, which are transmitted by insects. (DP-E)

5740 **Clancy, R.** *Immunology of tropical disease: an overview.* Papua New Guinea Medical Journal (Port Moresby, Papua New Guinea), 21(1), Mar 1978, 20-28. Engl. 30 refs.

Control of tropical infectious diseases must aim not only for the elimination of organisms from the community and the patient but also for the appropriate modification of the immune status of affected populations. This paper examines the complex interaction between host and microorganism with respect to three agents that commonly infect people in tropical countries: a virus, hepatitis B; a bacterium, *Mycobacterium leprae* (leprosy); and a protozoan parasite *Plasmodium* (malaria). Some practical problems relevant to certain characteristics of the host response associated with each disease are highlighted. (HC-L)

5741 **Coffi, E.** *Programme élargi de vaccination en Côte d'Ivoire. (Multiple vaccination programme in the Ivory Coast).* In Regamey, R.H., ed., Vaccinations in the Developing Countries, Basel, Switzerland, S. Karger, Developments in Biological Standardization, Vol. 41, 1978, 321-323. Fren.
Quinzième Congrès International pour la Standardisation Biologique, Le Gosier, Guadeloupe, 16-20 Apr 1978.
For complete document see entry 5792.

As part of its national public health plan, the government of the Ivory Coast has begun a vaccination programme against the most frequent childhood diseases: measles, tuberculosis, diphtheria, tetanus, whooping cough, and poliomyelitis. Pregnant women

will also be vaccinated against tetanus. Supported by USAID and UNICEF, the pilot project will at first be carried out in three sample areas and will cover 75 000 children aged 0-2 years and 40 000 pregnant women. Continued evaluation will be an essential part of the programme, which eventually will be expanded throughout the country. (FM)

5742 **DeMaeyer, E.M., Lowenstein, F.W., Thilly, C.H.** WHO, Geneva. *Control of endemic goitre.* Geneva, WHO, 1979. 86p. Engl. Refs.

The authors examine the significance of endemic goitre and outline the methods used for its control. Following an introductory chapter defining the disease, chapter 2 analyzes the technical aspects of salt iodination, including the equipment and staff needed, as well as the major components of a successful salt iodination programme. Chapter 3 examines the prevention of severe goitre with iodinated oil, outlining cost factors, personnel and equipment requirements, dosage and injection techniques, and long-term effects. The administrative and legal aspects of goitre control are covered in chapter 4. The final chapter surveys the world-wide prevalence of endemic goitre and assesses present control measures. (FM)

5743 **Dogramaci, I.** *Keystone of the community.* World Health (Geneva), Feb-Mar 1979, 20-23. Engl.
Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

The contribution of the family unit to child health is examined. Priority needs in family and child health include nutrition, the reduction of infant and maternal mortality, better antenatal and delivery care, integrated programmes in family planning, the early detection of physical and mental handicaps, further research into relationships between parents and children, and immunization. Research has indicated that children are most at risk when they come from socially and economically deprived families, those with too many children, and divorced parents. Suggestions for raising happy, healthy children are presented. (DP-E)

5744 **European Society for Paediatric Gastroenterology, Committee on Nutrition, Stockholm.** *Guidelines on infant nutrition; I: recommendations for the composition of an adapted formula.* Acta Paediatrica Scandinavica (Stockholm), Supplement 262, 1977, 3-20. Engl. 109 refs.

The scope, general aspects, and composition of both starting and follow-up infant formulae are discussed. The minimum nutritional requirements of formulae in terms of energy, protein, fat, sodium, carbohydrates, potassium, chloride, calcium, phosphorus, magnesium, iron, zinc, copper, trace minerals, and vitamins are described. The use of food additives such as thickening agents, packing materials, and heat processing are also examined. (DP-E)

5745 **FAO, Rome.** *Feeding of workers in developing countries.* Rome, FAO, Food and Nutrition Division, Economic and Social Policy Department, FAO Food and Nutrition Paper No. 6, 1976. 77p. Engl. Refs.
See also entry 6148.

This FAO publication presents information on food and work in relation to the feeding of workers that is intended for the use of government planners responsible for the formulation of food and nutrition policies and programmes, trade union officers, etc. A number of feeding programmes for workers in both public and private undertakings are described and recent studies on food intake and working efficiency are noted. To aid in the preparation of this publication, a questionnaire on workers' feeding was sent to governments in Africa, Asia, Latin America, and the Near East. The results of this enquiry are described and discussed in an appendix; several UN recommendations are also presented in appendices. Statistical data are included. (DP-E)

5746 **Finch, C.A.** *Iron nutrition.* Food and Nutrition (Rome), 3(4), 1977, 12-14. Engl. Refs.

This is a progress report on the present understanding of iron nutrition in man, particularly in developing countries. It is concerned with the quantitative aspects of iron balance and especially the availability of dietary iron, the recognition of iron deficiency and its prevalence, the effects of iron deficiency on the well-being of the individual, and the feasibility of modifying the iron balance by dietary means. Some statistical data are included. (Modified journal abstract)

5747 **Fisher, S.A., Donald, P.R.** *Present status of measles in the Cape Town area.* South African Medical Journal (Capetown), 53(12), 25 Mar 1978, 430. Engl.

In 1977, 796 patients with measles complications were admitted to the Capetown city hospital (South Africa) compared to 653 in 1976; 23 (2.88%) of the children died. The high incidence in 1977 probably reflects the normal cyclical nature of measles epidemics but could also be due to a temporary lack of measles vaccine at the end of 1976 and to an apparent increase in malnutrition associated with the prevailing economic climate. Recommendations for increasing immunization coverage are included. (DP-E)

5748 **Franks, J.A., Minnis, R.L.** *Maternal and child health/family planning project for the Gambia, West Africa and the People's Republic of Benin, West Africa.* Santa Cruz, Cal., University of California Extension, 1977. 1v.(various pagings). Engl.

The present document is the 2nd semiannual report of project activities for the period July-December 1977 being carried out under a USAID maternal child health (MCH) family planning project. Section 1 relates the training and administrative activities of the

University of California/Santa Cruz Extension Office, while section 2 contains a progress report prepared by the MCH staff in the Gambia, listing activities, problems, and recommendations. The last section describes the project activities and results in Benin. Numerous appendices provide service statistics and supplementary information about specific project activities. (EB)

5749 **Germain, M., Mouchet, J., Cordellier, R., Chippaux, A., Cornet, M.** *Epidémiologie de la fièvre jaune en Afrique. (Epidemiology of yellow fever in Africa).* Médecine et Maladies Infectieuses (Paris), 8(2), 1978, 69-77. Fren. 39 refs.

Based on recent research findings, this paper constitutes a provisional attempt at a structural interpretation of the epidemiology of yellow fever in Africa. Briefly, it postulates the existence of: an "endemic area" (equatorial forest), where primary circulation of the virus between its mosquito vectors and animal hosts occurs; an "emergence belt" (Sudanese savannas), where virus transmission to humans takes place with seasonal periodicity; and an "epidemic area," where the virus is occasionally introduced by an infected person and spread by high indices of *Aedis Aegypti*, which breed on domestic water supplies. Populations in the emergence belt in large towns, whatever their geographical location, are thus considered priorities in a vaccination programme. (HC-L)

5750 **Gilles, H.M.** *Clinical features and treatment of intestinal nematodes.* Tropical Doctor (London), 8(2), Apr 1978, 62-67. Engl.

The treatment of parasitic disease should depend on the intensity of the infection, the probability of reinfection, and economic considerations. In the tropics, therefore, the main aim of anthelminthis treatment should be to reduce the load of infection below the level of clinical significance, particularly in the presence of other conditions such as malnutrition, tuberculosis, anaemia, etc. The epidemiology, diagnosis, symptoms, and treatment (with emphasis on drugs) of ascariasis, enterobiasis, trichuriasis, hookworm, trichostrongyliasis, and capillariasis are discussed. (DP-E)

5751 **Haddock, K.C.** *Disease and development in the tropics: a review of Chagas' disease.* Social Science and Medicine (Oxford, UK), 13D(1), Mar 1979, 53-60. Engl. 43 refs.

In this study of the incidence and distribution of Chagas' disease in South America, the author stresses the ecological framework and the potential of human activities for spreading the disease. He examines methods of transmission, the life cycle of the parasite, and symptoms of infection. Using Brazil as an example, he illustrates how lack of epidemiological data can undermine attempts to determine the distribution of the vectors and thus allow settlement in areas that are suspect. Control measures include chemotherapy to fight infection, improved sanitation, and health education. (FM)

5752 **Henderson, R.H.** *Challenge of EPI.* World Health (Geneva), Feb-Mar 1979, 32-35. Engl.
Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

As an essential component of primary care, WHO has committed itself to providing immunization services for every child in the world by 1990. Six childhood diseases are now included in this Expanded Programme on Immunization (EPI): diphtheria, pertussis, tetanus, measles, poliomyelitis, and tuberculosis. The epidemiology of these diseases is examined and needs in the field of programme operations, basic and applied research, training, and information are discussed. (DP-E)

5753 **Hoffman, D.B., Lehman, J.S., Scott, V.C., Warren, K.S., Webbe, G.** *Control of schistosomiasis; report of a workshop.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 28(2), Mar 1979, 249-259. Engl. 60 refs.
Workshop on the Status of Schistosomiasis Control, Bellagio, Italy, 24-29 Oct 1977.

Nineteen scientists, field workers, and representatives of funding agencies active in schistosomiasis research and control met in Bellagio, Italy, in October 1977 to attempt to evaluate the effectiveness of current control methods and available technology. The deliberations included summaries of knowledge on the biology, transmission, and control of schistosomiasis and assessment of major control programmes and methodologies. It was concluded that, although current technology can be very effective, developing countries need less expensive modalities that require little monitoring and possibly have benefits extending beyond schistosomiasis control. (Modified journal abstract)

5754 **Hofvander, Y., Petros-Barvazian, A.** *WHO collaborative study on breast feeding.* Acta Paediatrica Scandinavica (Stockholm), 67(5), 1978, 556-560. Engl. 8 refs.

WHO, concerned with the declining breast-feeding rate in developing countries, has organized investigations in nine different nations of different aspects of breast-feeding and breast milk with the ultimate aim of formulating programmes of intervention. The basic epidemiological study of 24 000 mother/child pairs has just been completed and some preliminary data are reported on the pattern of breast-feeding in the socioeconomic groups studied (urban elite, urban poor, and traditional rural), which differ significantly in their breast-feeding rate as well as in the pattern of return of menstruation in breast-feeding and bottle-feeding mothers. (Modified journal abstract)

5755 **Jelliffe, D.B., Jelliffe, E.F.** *Amèliorer la nutrition des mères et des petits enfants; recommandations pour l'Annèe Internationale de l'Enfant, par l'Union International des Sciences de la Nutrition. (Improving the nutrition of mothers and infants; recommendations for the International Year of the Child by the International Union of Nutrition Sciences).* Contact (Geneva), 41, May 1979, 2-16. Fren.

The author makes recommendations in three areas of maternal child nutrition: the prenatal, nursing, and weaning periods. Pregnant women need a diet that will meet their own requirements, prepare for nursing, and nourish the fetus. Governments, health services, and local organizations should coordinate their efforts to promote breast-feeding, improve the industrial production of infant foods, and ease the situation of working mothers who wish to breast-feed. Information is given on the nutritive value of breast milk and techniques of breast-feeding. Introduction and preparation of weaning foods is also discussed and the relative value of commercial versus home-made products is assessed. (FM)

5756 **Karyadi, D.** *Prevention of vitamin A deficiency.* Philippine Journal of Nutrition (Manila), 30(2), Apr-Jun 1977, 87-91. Engl.

This article describes the conceptual framework for a set of programmes aimed at controlling and preventing vitamin-A-caused blindness in an at-risk population. Since the regular health services in most developing countries cannot provide satisfactory coverage, an extended special widespread field service might be feasible, such as the examples mentioned from India and Indonesia. Nutrition education and food fortification programmes have both proven to be viable solutions, although the same solution is not necessarily applicable to all countries. Problems regarding the safety doses, costs, and legislative aspects must be given special attention. (DP-E)

5757 **Kaufman, M.** *Vietnam, 1978: crisis in food, nutrition, and health.* Journal of the American Dietetic Association (Chicago, Ill.), 74(3), Mar 1979, 310-316. Engl. 10 refs.

On the basis of observations made during a study mission to Vietnam in 1978, the author comments on the food supply, nutritional status, health and medical care, and the problem of refugees in that country and suggests potential areas in which the USA might offer assistance. (HC-L)

5758 **Koopman, J.S.** *Investigation of related cases for the control of diarrhea in cities in developing countries.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 28(2), Mar 1979, 396-400. Engl.

An example of how follow-up of related cases of diarrhea of epidemiologically-oriented health promoters can result in important public health measures is described. The methodology of the investigation is discussed. In this example, it was found that a flavoured drink packaged in plastic by a process assuming increasing importance in food distribution was causing diarrhea because of unhygienic manufacturing conditions. A concomitant bacteriological study helped confirm the epidemiological findings and bacteriological cultures at different points in the manufacturing process suggested a solution to the contamination problem found. Statistical data are included. (Modified journal abstract)

5759 **Kwofie, K.** *Toward the design of a nutrition surveillance system for pregnant women in Zambia.* Social Science and Medicine (Oxford, UK), 13D(2), Jun 1979, 131-133. Engl. 15 refs.

A 1-year nutritional surveillance system is now being tested in Lusaka, Zambia, for the purpose of identifying factors contributing to neonatal health problems. A model has been developed to predict these problems among pregnant women so that more efficient nutrition programmes can be developed. If successful, the results of this pilot project could be applied in other parts of the country. (Modified journal abstract)

5760 **Latham, M.C.** *Strategies to control infections in malnourished populations—holistic approach or narrowly targeted interventions?* American Journal of Clinical Nutrition (Bethesda, Md.), 31(12), Dec 1978, 2292-3000. Engl. 14 refs.

The author argues that there is a place for both the holistic and the narrowly targeted approach to the control of infectious diseases in malnourished populations: the former where political, economic, and social conditions permit it and the latter where they do not. A trial of three interventions, one holistic and two narrowly targeted, to the prevention of xerophthalmia in the Philippines and a narrowly targeted project to control ascariasis in Kenya are used as examples in support of this argument. (HC-L)

5761 **le Bras, J., Sina, G.C., Triolo, N., Trova, P.** *Symptomatologie générale de la trypanosomiase humaine africaine de l'enfant; à propos de 93 cas. (Clinical features of human African trypanosomiasis in children; 93 cases).* Médecine Tropicale (Marseilles, France), 37(1), Jan-Feb 1977, 51-61. Fren. 12 refs.

The authors present 93 cases of human African trypanosomiasis in children aged 0 months-4 years and compare their symptoms with those of infected adults. The overlapping of the signs classically associated with the disease's early phases is noted: the relative frequency of cervical adenopathy and the neuro-psychological disturbances that, in an endemic zone, are essential warning signs. These include behaviour disorders, daytime somnolence, involuntary movements, Kerandle's sign, and over-active reflexes. When immunological analyses are unavailable, easily performed tests such as raised ESR, leucoytosis, and

positive formol-leuco-gelification can aid diagnosis. (Modified journal abstract)

5762 **Leal de Moraes, L.** *Proteção da saúde no pré-escolar. (Protecting the health of preschool children).* Jornal de Pediatria (Rio de Janeiro, Brazil), 44(5), 1978, 305-314. Portuguese. 38 refs.

The 1st part of this paper discusses the general needs of the preschooler in terms of medical care, nutrition, sleep, fresh air, play, etc., while the 2nd describes specific measures aimed at disease prevention (including the Brazilian immunization schedule), the correction of physical defects, and accident prevention. The need for a nationwide preschool health programme that would involve cooperation between health authorities at all levels and local communities is expressed. (HC-L)

5763 **Learmonth, A.** *Patterns of disease and hunger; a study in medical geography.* Newton Abbot, UK, David and Charles, Problems in Modern Geography Series, 1978. 256p. Engl. Refs.

Medical geography is defined as the study of patterns of distribution of disease, preferably viewed as dynamic rather than static patterns, and aiming at explanation. This book concentrates on some topics in which the author considers the geographical approach particularly rewarding; these include influenza, infectious hepatitis, and syphilis in developed countries and, in developing areas, malaria, yaws, trachoma, and onchocerciasis. A section on the geography of hunger covers malnutrition and related problems such as goitre and food supplies. Individual disease patterns are illustrated by case studies from the UK, Kuwait, and Libya. There are many maps and diagrams and an index. (RMB)

5764 **Longhurst, R., Payne, P.** *Seasonal aspects of nutrition: review of evidence and policy implications.* Brighton, UK, University of Sussex, Institute of Development Studies, Discussion Paper, Nov 1979. 35p. Engl. Refs.

This paper examines evidence from developing countries that suggests a seasonal pattern in the balance between nutrient intake (especially energy) and requirements. Data from a number of countries show weight loss among adults during the wet season and strongly suggest that this is the result of adverse changes in either energy intake or expenditure or both. The incidence of protein-energy malnutrition in children in many communities is also higher during the wet season, possibly due in part to a greater risk of infectious disease. Ways in which seasonal effects should be taken into account in programmes and policies relating to rural development are discussed. Statistical data are included. (RMB)

5765 **Lorenzo y Deal, J., Lorenzo y de Ibarreta, J.** *Alimentos del niño y Código Bromatológico Nacional. (Food for children and the National Bromatological Code).* Archivos de Pediatría del Uruguay (Montevideo), 48(4), 1977, 238-241. Span.

The author urges Uruguay to replace the various food laws that are now in force in different parts of the country with an updated version of the national bromatological code. An article exacting more precise labelling of canned goods, indicating their ingredients and their respective amounts, would greatly assist pediatricians in making recommendations regarding processed foods commonly consumed by children. (HC-L)

5766 **Lorenzo y Deal, J., Lorenzo y de Ibarreta, J.** *Alimentación del niño en hogares con recursos escasos. (Feeding of children from disadvantaged backgrounds).* Archivos de Pediatría del Uruguay (Montevideo)), 48(3), 1977, 156-158. Span. 7 refs.

This brief communication points out the need for further information on childhood malnutrition in Uruguay—a need that is becoming more acute in view of the recent intensification of its predisposing factors. Seventeen references to literature on the subject published from 1930-1964 are included in the bibliography. (HC-L)

5767 **Louvet, M., Saint-André, P., Toure, A., Penchenier, L., Gridel, F.** *Manifestations cutanées de l'onchocercose (à propos de 200 observations). (Cutaneous symptoms of onchocerciasis (some 200 observations)).* Bordeaux Médical (Bordeaux, France), 11(2), 1978, 93-100. Fren.

Basing their findings on 200 cases observed during a 1-year period in Mali, the authors explore the dermatological aspects of onchocerciasis. They describe several types of skin lesions that are symptomatic of the disease and indicate the location of each. It is suggested that, because of the unmistakable and uniquely characteristic cutaneous symptoms of onchocerciasis, an examination of the skin would prove to be an effective and simple way of diagnosing the disease. The authors also found that prolonged treatment with notezine was effective. (FM)

5768 **Mackay, D.M.** *Cholera Research Laboratory in Dacca, Bangladesh—a brief history.* Tropical Doctor (London), 9(1), Jan 1979, 31-32. Engl.

This article traces the history and development of the Cholera Research Laboratory, which was established in the early 1960s in Dacca, Bangladesh, with international support. The careers of the various directors are outlined and methods of funding discussed. The work carried out in this laboratory helped refine techniques of treatment that have reduced cholera mortality from 70% in untreated cases to less than 1%. Further research will concentrate on epidemiology, immunology, and the logistics of making modern therapy available in remote areas. The laboratory's coverage may eventually be extended to all diarrheal diseases. (DP-E)

5769 **Mahmud, S.H.** *Nutrition planning—problems and prospects.* In Papers and Recommendations of Nutrition Planning Workship (sic), Nathiagali, 22-28 July 1977, Islamabad, Planning and Development Division, Nutrition Cell, 15 Jan 1978, 8-16. Engl.
Nutrition Planning Workshop, Nathiagali, Pakistan, 22-28 Jul 1977.
For complete proceedings see entry 5781.

The problems of nutrition planning that are peculiar to Pakistan are examined and some solutions proposed. Major causes of malnutrition are diet, disease, poverty, food prices and availability, and traditional beliefs about nutrition and environmental sanitation. The author urges immediate implementation of action programmes, including surveillance, fortification, and nutrition education, with concurrent research. A multidisciplinary approach is a requirement of any intervention programme. Statistical data are included. (DP-E)

5770 **Malaysia, Ministry of Health.** *National Seminar on the Role of Specialists in Promoting Family Health.* Kuala Lumpur, Dicetak Oleh, 1977. 221p. Engl.
National Seminar on the Role of Specialists in Promoting Family Health, Penang, Malaysia, 12-18 Aug 1973.

A seminar was held in Malaysia to identify problem areas in maternal child health, to define how specialists could contribute to better family health services, and to draw up specific recommendations to the ministry of health on measures to improve family health services and develop plans to implement them. Topics discussed were maternal and child health, food and nutrition, communicable diseases, immunization, family planning, dental health services, traditional birth attendants (TBAs), utilization of TBAs, hospital and public health services, etc. (AF)

5771 **Mansueto, S.** *Diagnostica di laboratorio della leishmaniosi: stato attuale e possibilità pratiche. (Laboratory diagnosis of leishmaniasis: actual state and practical possibilities).* Giornale di Malattie Infettive e Parassitarie (Milan, Italy), 29(10), 1977, 895-910. Ital. 45 refs.

The author reviews the various laboratory methods used for diagnosing leishmaniasis and concludes that microscopic diagnosis and culture, together with immunofluoresence, remains the most simple, sensitive, and specific; the others, however, may furnish important diagnostic aids to clinical work if they are judiciously chosen and harmonized. (HC-L)

5772 **Mayer, J., Dwyer, J.T., Dowd, K., Mayer, L. ed(s).** *Food and nutrition policy in a changing world.* New York, Oxford University Press, 1979. 300p. Engl. Refs.

This collection of papers on food and nutrition policy in developing countries is concerned particularly with the nutritional status of young children. An introductory section studies demand, supply, and need, underlining the importance of cooperation between planners, economists, and nutritionists. Section 2 covers long-term nutrition planning at the national level. Section 3 presents specific short-term considerations such as improvements in local health care delivery and guidelines for supplementary feeding programmes. Section 4 describes the control of protein-calorie malnutrition and vitamin A deficiency. The final chapter examines the impact of the food industry on nutritional status, the potential of commercial weaning foods, and improvements in food processing and storage that would increase availability. (FM)

5773 **McCue, D.J.** *Family planning programs: a humanistic approach with special reference to Africa.* Edmonton, University of Alberta, Faculty of Graduate Studies and Research, Fall 1975. 154p. Engl. Refs.
Thesis.

Following an introductory chapter, the author analyzes the rationale behind most family planning programmes in developing countries and discusses the humanistic aspects that are often neglected. Programmes in six African countries are evaluated for their humanistic potential and the shortcomings of common approaches to family planning are underlined. An alternative approach, oriented to peoples' real needs, is suggested and two sources of the elements of a humanistic approach are examined. This involves community development experience and recent trends in the field of family planning. Their contributions to a humanistic approach are summarized in five guiding principles for family planning programmes. (Modified author abstract.)

5774 **Metselaar, D.** *Poliomyelitis: epidemiology and prophylaxis; 6: geographic synchronism in poliomyelitis epidemics in Kenya.* Bulletin of the World Health Organization (Geneva), 56(4), 1978, 649-651. Engl. 8 refs.
Also published in French and Spanish.

In Europe, poliomyelitis epidemics have tended to demonstrate synchromism, i.e., to occur in different countries at the same time. Synchronism has also been evident in Kenya's poliomyelitis epidemics, which have occurred in the three major population concentrations at the same time, although not, as in Europe, in neighbouring countries. Tentative explanations are put forward for the similarities and differences between Europe and East Africa and the importance of the Kenya pattern for planning control programmes based on mass immunization is stressed. (DP-E)

5775 **Ministry of Overseas Development, Trypanosomiasis Advisory Panel, London.** *Eighteenth Seminar on Trypanosomiasis.* Transactions of the Royal Society of Tropical Medicine and

Hygiene (London), 72(2), 1978, 109-122. Engl. Refs.

Eighteenth Seminar on Trypanosomiasis, London, UK, 22-23 Sep 1977.

The discussions of the various sessions of the 18th Seminar on Trypanosomiasis are summarized and appropriate references listed. The discussion groups covered protozoology, entomology and insecticides, biochemistry and chemotherapy, immunology, pathology, and epidemiology. Laboratory demonstrations of recent research on trypanosomiasis were presented on the 2nd day. A list of 56 exhibits is appended. (DP-E)

5776 **Minter, D.M.** *Efectos de la presencia de animales domésticos en viviendas infestadas sobre la transmisión de la enfermedad de Chagas al hombre. (Effects of the presence of domestic animals in infested households on the transmission of Chagas' disease to man).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 84(4), Apr 1978, 332-343. Span. 36 refs.

Simposio sobre Nuevos Enfoques en la Investigación de la Tripanosomiasis Americana, Belo Horizonte, Brazil, 18-21 Mar 1975.

Also published in English in American Trypanosomiasis Research, Washington, D.C., Pan American Health Organization, Scientific Publication No. 318, 1976, 330-337.

This paper discusses the intra-domiciliary transmission of *Trypanosoma cruzi* (Chagas' disease) with respect to the literature on *T. cruzi* infection rates found in dogs and cats, guinea pigs, livestock, rats and mice, bats, poultry, and game animals and the relative preference of a number of species of insect vectors for the blood of humans, dogs, cats, etc. The implications of the various animal/insect combinations for human health are discussed and a list of eight modes of secondary and tertiary infection in the home is set forward. (HC-L)

5777 **Mirchamsy, H., Shafyi, A., Mahinpour, M., Nazari, P.** *Age of measles immunization in tropics.* In Regamey, R.H., ed., Vaccinations in the Developing Countries, Basel, Switzerland, S. Karger, Developments in Biological Standardization, Vol. 41, 1978, 191-194. Engl. 19 refs.

Fifteenth International Congress for Biological Standardization, Le Gosier, Guadeloupe, 16-20 Apr 1978.

For complete document see entry 5792.

Maternal immunity to measles was studied in 500 Iranian neonates and in another group of 500 children aged 1-12 months prior to vaccination. The geometric mean titres of detectable haemagglutination inhibition antibody was 16 in newborns and absent in most children aged 3-5 months. Previous studies have indicated that, from 1970-1972, children aged 5-9 months from the lower socioeconomic classes were most susceptible to fatal measles complications. Based on the present data, the authors recommend that children in developing countries be vaccinated at 6 months of age and again 3-4 months later to assure full protection. (DP-E)

5778 **Moghissi, K.S., Evans, T.N.** *Nutritional impacts on women; throughout life with emphasis on reproduction.* Hagerstown, Md., Harper and Row, Medical Department, 1977. 254p. Engl. Refs.

The importance of proper nutrition to the health of women, especially during pregnancy, is examined in this collection of papers, which cover nutritional ages of women, the physiological basis of nutritional needs during pregnancy and lactation, the effects of youthful malnutrition on fertility, factors in intrauterine impoverishment, the importance of amino acids, the effect of maternal alcohol ingestion, carbohydrate metabolism, the effects of different types of contraception, nutrition in menopausal and postmenopausal women, and the clinical application of nutrition in perinatal practice. Many papers contain statistical data and lists of references. An index is included. (RMB)

5779 **Mohammad, A.** *Model for broad-based socio-economic development of the rural poor to affect stable nutritional improvement.* In Papers and Recommendations of Nutrition Planning Workship (sic), Nathiagali, 22-28 July 1977, Islamabad, Planning and Development Division, Nutrition Cell, 15 Jan 1978, 17-29. Engl.

Nutrition Planning Workshop, Nathiagali, Pakistan, 22-28 Jul 1977.

For complete proceedings see entry 5781.

The University of Agriculture, Lyallpur, Pakistan, has proposed a project aimed at breaking the cycle of malnutrition and poverty among the rural poor. The author outlines the objectives, background, justification, and methodology of the project, whose cost is estimated at US$3 million. The 1st phase is a nutrition-oriented rural development programme that will involve dairy farming as well as grain production. Back-up services such as sanitation, nutrition education, etc., will be tailored to the needs of individual villages. It is hoped that the project will serve to develop a model that can be used in rural areas all over the world. (DP-E)

5780 **Orkin, M., Maibach, H.I., Parish, L.C., Schwartzman, R.M. ed(s).** *Scabies and pediculosis.* Philadelphia, Pa., J.B. Lippincott, 1977. 203p. Engl. Refs.

International Conference on Scabies, Minneapolis, Minn., 1976.

This book is the result of an international conference on scabies held in 1976. A number of its chapters treat various aspects of scabies, including the disease's history, clinical aspects, special forms, pediatric and venereal manifestations, secondary infections, epidemiology, and diagnosis. Treatment methods, both

traditional and modern, are examined. The history, epidemiology, and treatment of pediculosis are also discussed. Many chapters include drawings, photographs, and statistical data and there is an index. (RMB)

5781 **Pakistan, Planning and Development Division, Nutrition Cell.** *Papers and recommendations of Nutrition Planning Workship (sic), Nathiagali, July 22-28, 1977.* Islamabad, Planning and Development Division, Nutrition Cell, 15 Jan 1978. 79p. Engl.
Nutrition Planning Workshop, Nathiagali, Pakistan, 22-28 Jul 1977.
Individual chapters have been abstracted separately under entries 5769, 5779, and 5808.

This document contains the conference agenda, recommendations, and the texts of papers presented. These papers cover various aspects of nutrition, including planning, programmes for the rural poor, agricultural production policies, child health, the development of a national nutrition policy, and the causes of malnutrition. Many contain statistical data. (DP-E)

5782 **Pan American Health Organization, Washington, D.C.** *Dengue in the Caribbean, 1977.* Washington, D.C., Pan American Health Organization, Scientific Publication No. 375, 1979. 186p. Engl. Refs.
Workshop on Dengue in the Caribbean, Montego Bay, Jamaica, 8-11 May 1978.

Participants from local countries met to discuss the 1977-1978 pandemic of dengue fever in the Caribbean and to review the associated epidemiological and laboratory surveillance activities and the resulting vector control campaigns. This document contains the conference papers, the opening addresses, and a list of participants and observers. Papers were presented by the representatives of Jamaica, Haiti, French Guyana, Martinique, Guadeloupe, etc. Many contain statistical data. (DP-E)

5783 **Pediatría, Santiago.** *Desnutriciòn precoz y desarrollo mental; una relaciòn seriamente mal entendida. (Early malnutriton and mental development; a relationship very poorly understood).* Pediatría (Santiago), 19(1), 1976, 5-6. Span.

This editorial cautions scientists, politicians, and other leaders against speaking as if a conclusive link between malnutrition in infancy and mental retardation had been found. No such link has been proven, simply because early malnutrition is invariably associated with the social, cultural, and intellectual deprivation of poverty—all factors responsible for slowing mental development. Findings from animal studies on the subject are briefly discussed. (HC-L)

5784 **Perkins, F.T.** *Need for quality control in the developing countries.* In Regamey, R.H., ed., Vaccinations in the Developing Countries, Basel, Switzerland, S. Karger, Developments in Biological Standardization, Vol. 41, 1978, 291-294. Engl.
Fifteenth International Congress for Biological Standardization, Le Gosier, Guadeloupe, 16-20 Apr 1978.
For complete document see entry 5792.

In developing countries, there is a need for better quality control of vaccines used in immunization programmes. The establishment of a quality control facility can assist in the checking of vaccines at the time of release and in monitoring the cold chain. In addition, the antibody responses of the local child population to the vaccines can be measured. Quality control should therefore be established before vaccine manufacture. Also, the economics of importing vaccines in bulk concentrates and diluting, blending, and filling them locally are considered. (Modified journal abstract)

5785 **Petana, W.B.** *Importance of clinical, psychological, and social effects experienced by patients with American trypanosomiasis (Chagas' disease).* Bulletin of the Pan American Health Organization (Washington, D.C.), 13(2), 1979, 131-133. Engl.
Also published in *Boletín de la Oficina Sanitaria Panamericana* (Washington, D.C., 1979.

Besides being a debilitating pathological condition, Chagas' disease poses an important socioeconomic and public health problem in countries where it is endemic. At present, there is an important need to rehabilitate trypanosomiasis patients so that they can continue functioning as useful members of the working community. Within this context, it is unfortunate that some inexperienced clinicians tend to interpret a positive serologic test for *T. cruzi* antibodies as proof of the disease, even when the patient shows no other symptoms. Such a patient is in danger of losing his livelihood as a result of an incorrect diagnosis. It is stressed that a serologic test is only a diagnostic test and not a definitive indicator of the disease. (DP-E)

5786 **Platt, H.M.** *General hospital: an avenue for socio-epidemiological research in human schistosomiasis and other helminthiases in large urban areas of northeast Brasil.* Social Science and Medicine (Oxford, UK), 13D(1), Mar 1979, 71-72. Engl.

Schistosomiasis is a continuing problem in large urban areas of northern Brazil. This short-term study emphasizes the importance of the general hospital as an avenue for socioepidemiological data collection. A working knowledge of Portuguese proved to be instrumental in gathering such data. Data on schistosomiasis and other parasitic diseases were collected from fecal examinations, patient medical records, and bedside conversations. The correspondence briefly dis-

cusses how these data may be interrelated so as to obtain an overview of urban schistosomiasis foci. (Modified journal abstract)

5787 **Quadros, C.A. de** *Immunization: fighting fire with fire.* Salubritas (Washington, D.C.), 2(4), Oct 1978, 4-5. Engl.
Also published in French and Spanish.

Some of the practical suggestions and guidelines concerning immunization and vaccination programmes presented in WHO's Expanded Program on Immunization Manual of Operations are summarized. The design of a modified picnic cooler and a small refrigerator for the cold storage of vaccines is described. Health educators in the community are advised to encourage public participation, use proper language, and instruct mothers in the possible side effects of vaccinations. Four ways of assessing vaccination programmes are recommended: surveillance of target diseases, evaluation of vaccine potency and seroconversion rates, evaluation of vaccine coverage, and evaluation of programme management and operations. The manual also contains a curriculum for the management of national, regional, and local immunization programmes. (DP-E)

5788 **Raphael, D. ed(s).** *Breastfeeding and food policy in a hungry world.* New York, Academic Press, 1979. 332p. Engl. Refs.

This collection of studies on the cultural, political, and economic aspects of breast-feeding is organized around five main topics. Chapter 1 discusses historical and contemporary attitudes to breast-feeding. Chapter 2 analyzes cultural factors that affect infant feeding practices in various countries. Chapter 3 examines the economic and commercial aspects of infant weaning foods. Chapter 4 studies the physiological, psychological, and public health factors related to breast-feeding. The final chapter describes several nutrition programmes concerned with encouraging breast-feeding in developing countries. (FM)

5789 **Ratard, R.C., Brava, L.L.** *Epidemiology of leprosy in the New Hebrides.* Leprosy Review (London), 49(1), 1978, 31-42. Engl. 17 refs.

This epidemiological study of leprosy in the New Hebrides was based on a population survey (41% coverage) and the results of 20 years of case-finding. The annual incidence of new cases is 45:1 000, of which 13% are lepromatous. Patients are predominantly male and the incidence increases with age. Leprosy is concentrated in families, in villages, among contacts, and in foci in which the prevalence is high. Most of the foci are well under control but some are still developing and could cause a small outbreak. Since leprosy is one of the area's major health problems, a careful and selective control programme is indispensable. Statistical data are included. (Modified journal abstract)

5790 **Rau, P.** *Mid-day meal programme.* Nutrition (Hyderabad, India), 12, 1978, 19-27. Engl.

The author examines the problems involved in planning nutritious noon meals for schoolchildren and traces the history of this programme in India, which has received aid for this particular feeding programme from various international organizations, particularly CARE and UNICEF. School meals can help to improve dietary habits, overcome food prejudices, improve school attendance, educate the parents, and overcome caste, creed, and social differences. The danger that the mother may reduce the amount of food the child receives at home and the risks of improper food hygiene are noted. (DP-E)

5791 **Ray, A.P.** *Malaria control, achievements, problems and prospects of eradication.* Journal of Communicable Diseases (New Delhi), 9(3), 1977, 145-171. Engl. 42 refs.

The concepts and evolution of malaria control and eradication programmes are discussed on a global basis. By the late 1960s, nearly 1 300 million of the 1 800 million people residing in endemic areas had received protection. The beneficial effects on disease incidence and economy and other collateral benefits are examined. The setbacks to malaria eradication programmes in various parts of the world are explained and future antimalaria campaigns are discussed. A strong plea is made that antimalaria activities should remain the responsibility of the unipurpose organization and not that of general health services. (Modified journal abstract)

5792 **Regamey, R.H. ed(s).** *Vaccinations in the developing countries.* Basel, Switzerland, S. Karger, Developments in Biological Standardization, Vol. 41, 1978. 445p. Engl., Fren. Refs.
Fifteenth International Congress for Biological Standardization, Le Gosier, Guadeloupe, 16-20 Apr 1978.
Individual papers have been abstracted separately under entries 5722, 5741, 5777, 5784, 6079, 6080, 6109, 6110, 6111, 6142, 6155, 6190, 6198, and 6244.

Texts and resumes of papers given at this conference are presented. Separate sessions covered: diphtheria, tetanus, and pertussis vaccines; miscellaneous bacterial vaccines; poliovirus vaccines; miscellaneous viral vaccines; the stability of vaccines at elevated temperatures; problems related to vaccines and vaccination programmes in developing countries; veterinary vaccines; and summary and conclusions. Author and subject indices and a list of participants are included. (RMB)

5793 **Revue d'Epidémiologie et de Santé Publique, Paris.** *Méthodes modernes de surveillance des maladies transmissibles. (Modern methods for surveillance of communicable diseases).* Revue d'Epidémiologie et de Santé Publique (Paris),

25(5-6), 1977, 349-533. Fren. 10 refs.
Deuxième Réunion Scientifique de l'Association des Epidémiologistes de Langue Française, Montpellier, France, 19-20 May 1977.

The papers presented at this conference on epidemiological surveillance of communicable diseases are divided into two sections, one of which presents methodological aspects and the other practical applications. Methodological studies examine modern methods of surveillance, the role of epidemiological models, and aspects of malaria epidemiology. Section 2 contains field studies of the surveillance and epidemiological forecasting of sexually-transmitted diseases, human brucellosis, influenza, viral diseases, intestinal schistosomiasis, parasitic diseases, and onchocerciasis. (FM)

5794 **Ridehalgh, F.** *Memorandum on tuberculosis control in developing countries.* London, OXFAM, 1971, 22p. Engl. 22 refs.

A carefully planned, long-range tuberculosis control programme must be based on strict, cost-benefit analysis in order to make the best use of the limited resources in developing countries. Key aspects of the programme should include: tuberculosis control teams for diagnosis, vaccination, and drug therapy; provision of laboratories to train staff in recognizing tuberculin bacilli in sputum smears; BCG vaccination given to all neonates and children without previous tuberculin testing; and emphasis on combined drug therapy. Cooperation should be sought from local organizations and leaders. Hospitalization of tuberculosis patients would be provided only in cases of acute medical or surgical emergencies. (FM)

5795 **Roberts, A.B., Harris, J.R., Taitai, T., Taraam, T., Tekanene, J.** *Cholera in the Gilbert Islands; 2: clinical and laboratory findings.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 28(4), Jul 1979, 685-691. Engl. 19 refs.
See also entry 6185.

Because the Gilbert Islands had never previously experienced a cholera epidemic, the 1977 outbreak in Tarawa caused problems in both diagnosis and clinical management. The clinical features of the 585 hospital admissions during the 1st 64 days were recorded. Eight deaths occurred in this period. A marked increase in cholera among malnourished children was noted. Simplified regimes for management were devised, including schemes for intravenous and oral rehydration that made extensive use of coconut milk. Paramedical personnel were used effectively during the epidemic. Prophylactic tetracycline was used in household contacts of patients and helped reduce subsequent illness. (Modified journal abstract)

5796 **Roemer, M.I.** WHO, New Delhi. *General living conditions and basic social programs in a former British colony: Ceylon.* In Roemer, M.I., Health Care Systems in World Perspective, Ann Arbor, Mich., Health Administration Press, 1976, 32-38. Engl.
For complete document see entry 6010; originally published in Health Demonstration Area in Ceylon, New Delhi, WHO, 1951, 18-28.

As part of a WHO survey of a comprehensive health demonstration area in Ceylon, data on general living conditions and overall social problems were collected. With the years and the intervention of various foreign assistance programmes, the number and variety of these social problems have increased. This article examines some of these social problems, particularly unemployment, agricultural development, and land tenure, and describes the efforts of government programmes, volunteer groups, and rural development societies to resolve them. (DP-E)

5797 **Scotney, N.** *Special needs in health education (2).* AFYA (Nairobi), 12, Sep-Oct 1978, 149-152, 154-156. Engl.
Originally published as the 2nd half of chapter 14 in entry 1933 (volume 3).

The author examines health education needs in Africa with regard to nutrition, home hygiene, birth spacing, mental health, and dental health. Nutrition educators must work to change food preferences, identify at-risk groups, and concentrate on early case-finding. Nutrition education is especially important in prevention and rehabilitation. Home hygiene education includes food preparation and water supply. Traditional cultural birth control practices such as abstinence should be emphasized and family planning should deal with infertility as well as excess fertility. Mental health education sould deal with the community as well as the patient and dental health education must stress both oral hygiene and sound nutritional practices. (DP-E)

5798 **Sharan, G.** *Problems of tuberculosis in Indian children.* Tropical Doctor (London), 9(3), Jul 1979, 104-105, 109. Engl. 9 refs.

The problems of diagnosis and treatment of tuberculosis in Indian children are discussed. To avoid the more common reasons for treatment failure, the author recommends: giving streptomycin, isoniazid, and thioacetazone or PAS to all patients, as this ensures against the development of resistant strains and shortens recovery time; giving isoniazid in a single dose of 300 mg; continuing treatment for 1-3 years; prescribing only antituberculosis drugs and avoiding tonics; emphasizing the need for continuous treatment to the child's parents; and ensuring that the child is followed-up at suitable intervals. (DP-E)

5799 **Simwinga, J.A.** *Outline of ideas of leprosy control in Africa.* AFYA (Nairobi), 13, Apr-May 1979, 45-49. Engl.

This article examines some of the prejudices and misunderstandings regarding leprosy patients throughout the world. Leprosy can be prevented by shooting all leprosy patients, isolating them (two methods that have been tried but are not recommended), or mass treatment. Successful mass treatment requires that: the drugs used be safe, effective, easy to give, and cheap; both medical personnel and the public be properly educated; emphasis be placed on early diagnosis and treatment; a well-organized mass campaign be implemented; and an effort be made to improve living standards. (DP-E)

5800 **Singh, A.** *Preventive ophthalmology.* Medical Journal of Malaysia (Singapore), 32(1), Sep 1977, 45-47. Engl.

In the Kuala Brang area of Kelantan (Malaysia), 18 cases of vitamin A deficiency were reported from January-October 1976; many of these persons had xerophthalmia and some had keratomalacia. Mobile health teams and school programmes also detected some children with Bitot's spots. Preventive recommendations suggested by the author include: vitamin A injections during immunization; vitamin A and D capsules of cod liver oil for children; encouraging home production of green vegetables, carrots, papaya, and egg-laying poultry; and health education. Recommendations are made concerning other eye diseases. (DP-E)

5801 **Somorin, A.O., Adesugba, J.A., Agbakwu, S.N., Hunponu-Wusu, O.O.** *Cutaneous tuberculosis in Nigerians.* East African Medical Journal (Nairobi), 55(4), Apr 1978, 163-165. Engl. 8 refs.

In Lagos, Nigeria, 12 patients with suspected onchocerciasis who were attending a dermatology outpatient clinic were diagnosed as having papulonecrotic tuberculosis on clinical and histological grounds. Of these patients, 7 had radiological signs of pulmonary tuberculosis and 5 an elevated erythrocyte sedimentation rate. All recovered after 6-18 months of treatment. It is suggested that onchocerciasis patients who do not respond to conventional treatment be tested for papulonecrotic tuberculosis. Statistical data are included. (DP-E)

5802 **South African Medical Research Council, Capetown.** *Food fortification in South Africa; report of a Medical Research Council Project group.* South African Medical Journal (Capetown), 53(19), May 1978, 744-750. Engl. 60 refs.

This committee report attempts to define necessary food fortifications to be implemented in South Africa, especially among blacks, whose staple food is maize meal. It examines the evidence of deficiency and proposes measures and recommendations for fortifying maize and other staple foods by improving their content in terms of protein and energy, vitamin A, thiamine, riboflavin and nicotinic acid, folate, vitamin B12, vitamin C, vitamin D and calcium, iron, iodine, and flourides. Nutrition training courses for physicians and evaluation measures are also recommended. (DP-E)

5803 **Surjantoro, P., Soeprapto, Marwoto** *Five years annual report on neonatal diarrheal outbreaks in Yogyakarta.* Paediatrica Indonesiana (Jakarta), 18(9/10), Sep-Oct 1978, 269-273. Engl. 8 refs.

An increase in the admission of low-birth-weight babies to the Bethesda Hospital (Yogyakarta, Indonesia) nursery caused overcrowding and a drop in hygienic standards that eventually led to several outbreaks of diarrhea. The management of these cases is discussed. The authors suggest that, to prevent similar outbreaks of diarrhea in neonatal nurseries, especially in developing countries, three points should be considered: planning of bed capacities to meet the needs of the surrounding area, establishing the proper ratio of nurses to babies to ensure optimal nursing care, and retraining nursery staff every 3-6 months. (DP-E)

5804 **Tatochenko, V.** *Education in health.* World Health (Geneva), Feb-Mar 1979, 24-27. Engl.
Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

Traditionally, health education aims to foster hygienic habits, promote nutrition, and create environmental conditions conducive to healthy physical and mental development. While disease prevention is an important part, some effort must be made to prepare the individual to function effectively under the stressful conditions of modern life. Such an effort would emphasize physical activities, healthy eating habits to avoid obesity, and better sex education. Health education for children should be carried out not only by health professionals but also by parents, teachers, and other social figures. Examples from the USSR are given. (DP-E)

5805 **Ticas, J.M.** *Mezclas alimenticias de alto valor nutritivo y bajo costo en la lucha contra la desnutriciòn proteino-calòrica. (Role of food mixtures of high nutritional value and low cost in combatting protein-calorie malnutrition).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 85(1), Jul 1978, 26-39. Span. 14 refs.
Primeras Jornadas Peruanas sobre la Salud del Niño, Trujillo, Perú, 12-15 Feb 1975.

Locally produced, low-cost, nutritious vegetable mixtures have proven acceptable and are being marketed as supplementary foods in Guatemala, Colombia, Peru, Haiti, Bolivia, Ecuador, Chile, and Honduras. This paper discusses the ecology of malnutrition in Latin America and hypothesizes that widespread consumption of these mixtures by mothers and young children in the lower socioeconomic classes could, over

not too long a period, significantly reduce the prevalence of malnutrition. (HC-L)

5806 **Tomkins, A.M.** *Role of intestinal parasites in diarrhoea and malnutrition.* Tropical Doctor (London), 9(1), Jan 1979, 21-24. Engl.

This article examines the ways in which intestinal parasites contribute to malnutrition. Some parasites cause diarrhea, produce a blood loss leading to iron and protein deficiencies, damage the intestinal mucosa leading to malabsorption of nutritients, and reduce the appetite by causing abdominal pain. The symptoms associated with different parasitic diseases are discussed and suggestions for management set forth. (DP-E)

5807 **Vaughan, J.P.** *Review of cardiovascular diseases in developing countries.* Annals of Tropical Medicine and Parasitology (Liverpool, UK), 72(2), 1978, 101-109. Engl. Refs.

This review examines the possible association in developing countries between development and blood pressure, coronary heart diseases, and rheumatic heart diseases. Previous studies have shown that hypertension is rare and coronary heart disease almost unknown in many isolated communities, while rheumatic disease is fairly common. Consideration is given to the possibility that development in such communities may lead to a higher incidence of hypertension and coronary heart disease and to a reduction in the incidence of rheumatic heart disease. Epidemiological methods for separating environmental and genetic causes are discussed. (Modified journal abstract)

5808 **Wasti, S.M.** *Role of infant and child nutrition in design and development of national nutrition policy.* In Papers and Recommendations of Nutrition Planning Workship (sic), Nathiagali, 22-28 July 1977, Islamabad, Planning and Development Division, Nutrition Cell, 15 Jan 1978, 39-47. Engl.
Nutrition Planning Workshop, Nathiagali, Pakistan, 22-28 Jul 1977.
For complete proceedings see entry 5781.

This paper stresses the problems in infant nutrition and makes recommendations for solving them. Malnutrition is largely caused by improperly prepared infant foods, lack of proper hygiene, and an inadequate supply of local weaning foods, often introduced at too late an age. Related causes include socioeconomic status, poor public health and environmental sanitation, and a lack of health services and health education programmes. Some solutions are subsidized milk programmes, the promotion of environmental and household sanitation, immunization, and the production of local weaning foods. Statistical data are included. (DP-E)

5809 **Wertheim, L.J., Abreu, A., Fernández, F., Ayrado, A.** *Programa de control de enfermedades venèreas. (Venereal diseases control programme).* Medicina Cutánea Ibero-Latino-Americana (Barcelona, Spain), 5(4), 1977, 261-265. Span.

The Cuban programme for the control of venereal diseases is characterized by a multidisciplinary approach, the standardization of diagnostic and notification methods, the deployment of researcher-interviewers for follow-up of contacts, and continuous and permanent evaluation of results. This paper presents data demonstrating the rise in notification rates for syphilis from 1969-1973 and some of the epidemiological features of the disease in 1973. (HC-L)

5810 **WHO, Copenhagen.** *Surveillance and control of rabies; report on a conference.* Copenhagen, WHO, 1978. 69p. Engl. 14 refs.
Conference on Surveillance and Control of Rabies, Frankfurt-am-Main, Germany FR, 15-19 Nov 1977.

Wildlife and canine rabies continue to pose a public health threat in Europe and the Mediterranean basin, respectively. This conference was convened to examine the epidemiology of the disease, review existing methods of control and propose others, and promote international cooperation in these endeavours. The conference presents information of an epidemiological and technical nature. (HC-L)

5811 **WHO, Copenhagen.** *Surveillance and control of sexually transmitted diseases; report on a symposium.* Copenhagen, WHO, 1977. 79p. Engl. Refs.
Symposium on the Surveillance and Control of the Sexually Transmitted Diseases, Vienna, Austria, 21-25 Sep 1976.

This report summarizes aspects of sexually transmitted disease control in Europe. An introductory chapter outlines the current increase in venereal diseases and discusses data collection. Chapters on case-finding deal with screening techniques and contact-tracing. Chapter 5 discusses economic aspects. The role of health education in controlling sexually transmitted disease is covered and recommendations are made for greater coordination of educational programmes. Chapter 7 examines the training of personnel and recommends integrated, multidisciplinary teaching and continuing education for general practitioners. Chapter 8 reviews laboratory activity in Vienna and the final chapter presents the symposium's main recommendations. (FM)

5812 **WHO, Geneva.** *Viral respiratory diseases; report of a WHO scientific group.* Geneva, WHO, WHO Technical Report Series No. 642, 1980. 63p. Engl.

This WHO report on viral respiratory diseases covers: the WHO acute respiratory diseases programme in the context of technical cooperation with and among developing countries; public health importance of acute respiratory disease; viruses, rickettsiae, and mycoplasmas as aetiological agents of respiratory

diseases; laboratory investigation; surveillance at the country level; management at the primary health care level; antiviral drugs; the role of immunization; research needs; and recommendations. Included in annexes are instructions for diagnosis by virus isolation and serology and immunoflourescence and a guide for training community health workers in the care of children with acute respiratory diseases. (RMB)

5813 **WHO, Geneva.** *Energy and protein requirements, report of a joint FAO/WHO ad hoc expert committee.* Geneva, WHO, WHO Technical Report Series No. 522, 1973. 118p. Engl. 166 refs.

Also published in French, Russian, and Spanish.

The purpose of this FAO/WHO expert committee was to define energy and protein requirements for men, women, and children as accurately as possible, taking into consideration such variables as physical activity, body size, climate, pregnancy and lactation, etc. The committee report includes a glossary of terms and units, a review of methods used in evaluating the nutritive value of proteins, an example of the application of energy and protein estimates at the national or population level, and some areas for future research. (HC-L)

5814 **Wight, J.A.** *Non-formal nutrition/education for rural development in Latin America.* Archivos Latinamericanos de Nutrición (Caracas), 27(3), 1977, 285-293. Engl. 17 refs.

The need for and contents of informal nutrition education programmes for rural teachers and other rural education agents in Latin America are examined. Such programmes should teach knowledge and skills for household management, nutrition for all family members, consequences of population factors such as birth intervals and family size on family nutritional status, family responsibilities, community participation, etc. Guidelines for an outreach university nutrition education programme that cover procedure, instructional modules, and methodology are presented. (DP-E)

5815 **Wijers, D.J.** *Bancroftian filariasis in Kenya; 4: disease distribution and transmission dynamics.* Annals of Tropical Medicine and Parasitology (Liverpool, UK), 71(4), 1977, 451-463. Engl. Refs.

This article discusses the unexpected distribution of Bancroftian filariasis in the Coast Province of Kenya and the factors that may influence transmission dynamics and the resulting degree of endemicity. These factors include climatic conditions and population densities, decreasing and increasing endemicity, disease foci, interrupted and continuous transmission, and prevalence and numbers of infective larvae invading the host population. It is suggested that the African and Indian forms of the disease may be caused by two different strains. Maps and statistical data are included. (DP-E)

5816 **Wright, S.G.** *Anaemia in infancy.* Tropical Doctor (London), 9(3), Jul 1979, 128-132. Engl.

Anaemia is common in infants in the tropics and is an important cause of death in this age group. This article examines anaemia's clinical features, its diagnosis by laboratory investigation, and its aetiology by cause. The most common causes are: deficiencies of iron, folates, or vitamin B12; blood loss; genetically determined abnormalities; and infections. The treatment and prevention of anaemia are also discussed. An appendix gives instructions for performing a reticulocyte count. (DP-E)

III Health Care Implementation

III.1 Inpatient Care

See also: 5645, 5803, 5844, 5883, 5940, 5997, 6119.

5817 **Ajao, O.G.** *Thyroidectomy under local anaesthesia.* Tropical Doctor (London), 9(2), Apr 1979, 73-75. Engl.

In many tropical countries, because of the severe shortage of anaesthesists, anaesthetic drugs, and equipment, certain types of operations normally carried out under general anaesthesia are done, with acceptable results, under local anaesthesia. This paper presents 17 cases of thyroidectomy performed under local anaesthesia at a peripheral hospital in Nigeria. Drugs, equipment, and preparation are discussed and the procedure is explained in detail, since it differs slightly from the technique used under general anaesthesia. The author notes that thyroid glands to be removed under local anaesthesia should have neither retrosternal nor retroesophageal extension. (DP-E)

5818 **Akinla, O., Omolayole, A., Fajembola, A.** *Emergency caesarian section at the Lagos University Teaching Hospital (January 1969-December 1973).* Nigerian Medical Journal (Lagos), 8(3), May 1978, 203-206. Engl.

From January 1969-December 1973, 10 292 deliveries were conducted in the obstetric unit of the Lagos University Teaching Hospital (Nigeria). Of these, 972 cases were delivered by caesarean section, giving a section rate of 9.4%. Seven hundred and twenty-two of these caesarean sections were carried out as emergency operations, which gives an emergency section rate of 74.3%. Reasons are adduced for this relatively high figure. The indications for the operation and the maternal and perinatal hazards are discussed. Methods are suggested for reducing the mortality and morbidity figures to a minimum. Statistical data are included. (Modified journal abstract)

5819 **Armon, P.J.** *Use of honey in the treatment of infected wounds.* Tropical Doctor (London), 10(2), Apr 1980, 91. Engl.

The author's use of pure honey as a healing agent in the case of infected surgical wounds and bedsores is described and two case histories are given as examples of its efficiency. Infected wounds, which are thoroughly cleansed before treatment and then covered with a thin layer of pure honey and a dry dressing three times a day, become bacteriologically sterile within 7-10 days and heal rapidly. Locally produced honey may be used. (AF)

5820 **Association of Surgeons of East Africa, Lusaka.** *Burns symposium.* AFYA (Nairobi), 12, Jul-Aug 1978, 113-115, 117-120, 122-126. Engl. Annual Conference of the Association of Surgeons of East Africa, Burns Symposium, Lusaka, Zambia, 1977.

Summaries of papers on various aspects of burns management given at this 1977 symposium are presented. Topics covered include: epidemiology; the assessment and management of the shock phase, emphasizing fluid replacement therapy; the management of the burn wound, which can be done by four methods: exposure, closed dressings, topical applications, and primary excision and skin grafting; systemic complications and their management; the burned hand; and organization of burn care. The article concludes with a discussion of the minimum requirements for treating burns in a small rural hospital. (DP-E)

5821 **Berkeley, J.S.** *Patients admitted to the new central hospital in Bhutan.* Journal of Tropical Medicine and Hygiene (London), 81(9), Sep 1978, 172-175. Engl.

Infectious and respiratory diseases account for 31% of the admissions to Bhutan's new central hospital, while road accidents are the 2nd most common diagnosis on admission. This review of inpatient admissions underlines the importance of maternal child health in health services planning; many of the women admitted with complications of pregnancy or labour would have died without this specialized care. The hospital's major contribution is to back up the primary care services provided by community health workers. Statistical data are included. (Modified journal abstract)

5822 **Bing, J.** *Traditional Chinese prescription principles in modern balanced anesthesia.* Chinese Medical Journal (Peking), 92(5), May 1979, 360-365. Engl.

The integration of traditional Chinese and Western medicine in modern balanced anaesthesia is still in progress. Four surgical care histories illustrate the basic principle of anaesthesia: the amount and type of drug administered should be based on the patient's

actual condition and appropriate use and adjustment of drug combinations. The main anaesthetics, adjuvants, and induction agents are discussed. (DP-E)

5823 **Braun, R.C.** *Bladder trocar for emergency cystostomy.* Tropical Doctor (London), 9(1), Jan 1979, 36. Engl.

Urinary retention is a common problem in the tropics, especially as the number of elderly men increases. To avoid the surgical and recovery problems of open cystostomy, a bivalve nasal speculum of the Killian type with a 3-inch blade has been modified to serve as a bladder trocar. Instructions for performing the cystostomy and inserting a self-retaining catheter are given. The whole procedure takes 1-2 minutes and blood loss is minimal. (DP-E)

5824 **Carpenter, T.O.** *Basic pediatrics: a new American physician in an African village hospital.* Southern Medical Journal (Birmingham, Ala.), 72(2), Feb 1979, 209-214. Engl.

An American physician describes his experiences at a rural South African hospital. The 240-bed hospital averaged 3-4 pediatric admissions daily, mainly for malnutrition and tuberculosis. Other problems included diarrhea, parasitic and infectious diseases, and poisoning from herbal remedies. The author discusses: the hospital's facilities, staff, and laboratory capabilities; the diseases prevalent in the area; and the practice of community medicine. Five case histories are presented. (DP-E)

5825 **Ebong, W.W.** *Management of open fractures in remote tropical areas.* Tropical Doctor (London), 9(1), Jan 1979, 37. Engl.

Apart from antibiotics and tetanus immunization, the most important factor in reducing mortality and morbidity from fresh open fractures is thorough surgical treatment for the wound, consisting of toilet and debridement, primary wound excision, and, wherever possible, closure. Because lack of sterile equipment and facilities often make this treatment impossible, this article describes a method of treating these wounds using frequent Eusol dressings and antibiotics whose final results were at least as good as those of more conventional treatment. The method's only disadvantage is the prolonged period of dressing. (DP-E)

5826 **Fairbrother, P., van Middelkoop, A., Carson, B.** *Simple foam test on liquor amnii to predict neo-natal outcome.* Tropical Doctor (London), 9(2), Apr 1979, 81-84. Engl.

A simplified modification of the foam test for assessing fetal lung maturity by measuring the amount of lechithin in the amniotic fluid is presented for use in rural hospitals, even those with minimal laboratory facilities. The materials and methods are described and instructions for performing amniocentesis using the transabdominal-subumbilical midline technique are given. The risks of amniocentesis are considered. (DP-E)

5827 **Green, G.M.** *Setting up a central sterile supply department.* Medical Missionary Association (London), 18(1), Mar 1979, 3-6. Engl.

A nurse recounts her experience in setting up an economical central sterile supply department, meant to provide a continuous supply of sterile equipment, in an Indian hospital. After an initial survey to determine what was needed, the author and a local nurse set up a 4-room department (receiving room, packaging and preparing room, autoclave room, and sterile store) and made up the necessary packs using, whenever possible, local materials. The staff and the operations of the department are described. (DP-E)

5828 **Hibler, M.** *Psychiatry in Senegal: blending the old and the new.* AFYA (Nairobi), 14, Mar-Apr 1979, 49-51. Engl.

A Senegalese psychiatric village where mentally ill patients are treated by a combination of Western and traditional medicine is described. The village operates on the principles that it is essential not to isolate the patient, confine him, or drastically change his environment and that the patient's family and friends should be involved in his treatment. Each patient is accompanied by at least one relative who lives with him in the village; the staff and their families are also residents. Some traditional cultural attitudes towards mental illness and the development of psychiatric services in Senegal are examined. (DP-E)

5829 **Ling, J.C.** *Sage-femme. (Wise woman).* AFYA (Nairobi), 13, Jan-Feb 1979, 14-17. Engl.

The author describes his visit to a maternity centre in a rural village in Senegal. Run on a cooperative basis by a midwife and 25 birth attendants, the centre provides prenatal and postnatal care as well as delivery services to 36 surrounding villages. The compound was built by the villagers themselves and offers a home-like atmosphere for the mothers. Each patient stays about 1 week and pays $1.50 or the equivalent. The attendants received 3 weeks of training from regular midwives at a larger centre. In 3 years, the maternity centre has greatly reduced infant and maternal mortality. (FM)

5830 **Pearson, C.A.** *Inguinal herniorrhaphy: a guide for the general practitioner surgeon.* Tropical Doctor (London), 9(2), Apr 1979, 51-60. Engl.

These guidelines are intended to help general practitioners in developing countries perform hernia operations under local conditions. Detailed instructions are given with regard to anaesthesia, preparation of the operating area, the operating equipment, operating procedure, steps of postoperative care, and the direct hernia. Many illustrations are included. (DP-E)

5831 **Wilharta, A.S., Sutejo, R.** *"Rose System" in overcoming the second cholera outbreak in Jakarta from May 25-30, 1976.* Paediatrica

Indonesiana (Jakarta), 18(1/2), Jan-Feb 1978, 6-10. Engl. 12 refs.

A methodology for treating acute dehydration and diarrhea in children, called the ROSE system, was developed by medical authorities at a rehydration centre in Jakarta, Indonesia, during a 1976 cholera outbreak. It consists of: 1) rehydration with Ringer's lactate solution, 2) oralyte in boiled water given *ad libitum*, 3) simultaneous administration of intravenous solution, and 4) education of the child's parents on the importance of continuing the treatment. All 70 patients treated with the ROSE system survived; in addition to the efficiency of the treatment, the authors attribute this zero mortality to the excellent cooperation among the health authorities and personnel and to the fact that all the children were brought to the centre within 3 hours after the onset of diarrhea. (DP-E)

III.2 Outpatient Care

See also: 5648, 5894, 5936, 5958, 5990, 5994, 5997, 6213.

5832 **Banerjee, J.K.** *Reflections on Bangladesh's rural health care system.* Human Futures (New Delhi), 1(3), Autumn 1978, 199-201. Engl.

An Indian physician describes his visit to Bangladesh's *Gonoshasthaya Kendra* or People's Health Centre. Its staff consists of 4 doctors, 45 paramedics, 10 administrative staff, 1 pharmacist, 1 laboratory technician, and 35 workers from the school, workshop, agricultural, and women's centres. Some of the problems the author points out are the centre's dependence on foreign aid, the tendency of paramedics to leave government service and set up on their own, and the need to stress preventive medicine and family planning. The possibility of setting up such centres in India is examined. (DP-E)

5833 **Bordes, A., Couture, A.** *For the people, for a change; bringing health to the families of Haiti.* Boston, Mass., Beacon Press, 1978. 299p. Engl.

This book chronicles the 12-year partnership between the Unitarian Universalist Service Committee (UUSC) and the people of Haiti. It describes from the beginning the work of Dr. Ary Bordes to create a successful model of development for the Third World, one which combines maternal child health care with family planning education and village-level agricultural development. The UUSC is now working to make the lessons learned in Haiti available to other nations in the Caribbean, in West Africa, and throughout the developing world. (Modified journal abstract)

5834 **Bradley, P.A.** *Under-fives service in Bangladesh.* Tropical and Geographical Medicine (Haarlem, Netherlands), 29(1), Mar 1977, 99-102. Engl.

In 1971, a maternal child health (MCH) service staffed by lady health visitors (LHVs) was established on Bhola Island in Bangladesh. After 27 months training, the LHVs are assigned to MCH centres that provide antenatal and postnatal care, midwifery and child health services, health education, family planning, preventive medicine, and simple treatment. Local problems that had to be taken into consideration when planning the functions of these centres included malnutrition, overcrowding, understaffing, referrals, confinements, and areas of coverage. (DP-E)

5835 **Burrett, B.A.** *Community health programme in Bhutan.* Medical Missionary Association (London), 18(1), Mar 1979, 12-14. Engl.

In 1975, Bhutan's Mongar Hospital, originally part of a leprosy mission, became involved in the development of a community health programme. Surveys were conducted to enumerate the local population and determine their health needs. Local governments encouraged villagers to build health units, which were staffed with health workers trained in the hospital and equipped by UNICEF. Some of the problems involved in setting up the programme are discussed. (DP-E)

5836 **Development Communication Report, Washington, D.C.** *Health care for the people, by the people: Project Piaxtla.* Development Communication Report (Washington, D.C.), 27, Jul 1979, 5-6. Engl.

Project Piaxtla, a health care network founded in 1963 and run by the people themselves, attempts to involve some 10 000 Mexican peasants from more than 100 villages in the process of meeting their own health needs in a humane, economically realistic, and ecologically sound manner. Originally run by US volunteers, the project is now staffed entirely by local villagers and is working to achieve financial self-sufficiency. In addition to health education and prevention, one of the project's major activities is training village health workers or rural health promoters. Similar projects are now being started in other parts of Mexico. (DP-E)

5837 **Florentino, C.A.** *Programa de controle da tuberculose "Coração do Brasil." ("Heart of Brazil" tuberculosis control programme).* Boletín de la Oficina Sanitaria Panamerica (Washington, D.C.), 83(5), Nov 1977, 432-438. Portuguese.

In order to alleviate pressure on facilities in Brasilia, Brazil, a simplified tuberculosis control programme was instituted in 1975 in 40 municipalities of the adjacent states of Goias and Minas Gerias. With the cooperation of local officials and the community, health units were installed, enlarged, or adapted and local personnel trained in BCG immunization, case finding, and ambulatory drug therapy. The programme has proved so successful that it is to be extended to more municipalities while incorporating further preventive measures. (HC-L)

5838 **Forichon, E., Sebib, C.** *Services de la prévention en Algérie; l'expérience du secteur sanitaire de Meftah (Blida). (Preventive health services in Algeria; a report on the Meftah (Blida) health area).* Courrier (Paris), 27(6), 1977, 537-541. Fren.

The authors describe their experiences in the implementation of an interdisciplinary public health project in Algeria. Activities in the areas of environmental health, particularly water supply and waste disposal, maternal child health, school health, and tuberculosis control are examined. They also outline the setting up of a system of birth registration and discuss the training of community health workers. The need for better cooperation between the services responsible for preventive programmes is noted. The authors stress that the quality of this cooperation is closely related to the training level and knowledge of public health problems of the administrative personnel. (Modified journal abstract)

5839 **Gould, G.** *Making rural health work.* Topic (Washington, D.C.), 99, 1976, 9-13. Engl.

The Danfa Comprehensive Rural Health and Family Planning Project was established in Ghana to provide training for the young doctors and medical assistants coming out of the country's recently established medical school and find out how best to provide health services to the rural population using existing resources, personnel, and finances. This article concentrates on the project's unique, computerized medical records maintenance system that now contains more than 6 million pieces of information. This system has helped health personnel and planners raise coverage levels from 25%-85% of the population and serves as a model for the developing world. (DP-E)

5840 **Hesperian Foundation, Palo Alto, Cal.** *About Project Piaxtla, a village-run health care network in the mountains of Western Mexico, and the Hesperian Foundation, a small group committed to health education and informed self care.* Newsletter from the Sierra Madre (Palo Alto, Cal.), (13), Feb 1979, 1-9. Engl.

This progress report reviews the activities of Project Piaxtla, a village-run health care project in western Mexico supported by the Hesperian Foundation. The Foundation now provides only 50% of the project's operating costs and the village health team is in complete control. A training programme for village health promoters is an important part of the project. Other activities include the CHILD-to-child programme that encouraged schoolchildren to become involved in the health of younger children. Currently the project is manufacturing special, inexpensive measuring spoons for use in preparing rehydration solutions. The report lists related resource materials available from the Hesperian Foundation. (FM)

5841 **Kalissa, R., Mandianga, M.** *Programme actuel et perspectives d'avenir du programme élargi des vaccinations au Zaïre. (Present activities and future perspectives of the expanded vaccination programme in Zaire).* Médecine d'Afrique Noire (Paris), 25(12), Dec 1978, 793-796. Fren.

The vaccination programme in Zaire is an extension of the national smallpox eradication campaign begun in 1968. In the 1st phase, mobile vaccination units conducted a mass campaign that covered the entire country in 3 years. The existing network of public health centres was upgraded and now maintains contact with 70% of the population. Evaluation of 2% of the population every year provides an assessment of the level of protection against smallpox. A pilot project to provide simultaneous protection against tuberculosis, poliomyelitis, measles, tetanus, whooping cough, diphtheria, and smallpox is underway in Kinshasa and will gradually be expanded to other areas. (FM)

5842 **Karunaratne, K.E., Hight, P.L.** *Community health screening in Taumarunui.* New Zealand Medical Journal (Wellington), 86(597), 12 Oct 1977, 330-332. Engl. 14 refs.

A community health screening project was organized out of a small country hospital in Taumarunui, New Zealand, using only local funds and resources. Its aim was to detect presymptomatic disease in adults aged 30 years or more and to alert them to their particular risk factor. Thirty percent of the target population participated in the screening. This paper documents the project's methods and results and concludes that such an endeavour can be undertaken at relatively low cost in the expectation of worthwhile results. (HC-L)

5843 **Kim, J.S. ed(s).** *Chunseong Gun Community Health Program.* Seoul, Seoul National University, School of Public Health, Jul 1975. 130p. Engl.

The Chunseong Gun Community Health Program (Korea) was launched in October 1972 with a view to providing community-oriented training for medical students, demonstrating an effective rural health care delivery system, and conducting various research projects related to rural health. This progress report describes the project's organization and activities, training component, setting, research results to date (baseline data), and future directions. (HC-L)

5844 **Kingston, R.** *Leprosy outreach in Zambia.* Saving Health (London), 18(2), Jun 1979, 5-7. Engl.

The author describes her experiences while serving in a leprosarium attached to the Luampa Mission Hospital, Zambia. Approximately 100 inpatients are housed in small huts in a village-like compound, while a network of clinics, many of them mobile, provides care for some 650 outpatients. The more distant clinics are manned by resident dressers and the nearer mobile

clinics are visited by itinerant cyclist dressers and, twice a year, by supervisory staff from the hospital. There is a total of 25 staff members, mostly male and many of them former leprosy patients who have a 1st-hand understanding of the disease. The personnel needs of the Mission are outlined. (DP-E)

5845 **Leprosy in India, New Delhi.** *WORTH Trust; a report on their activities.* Leprosy in India (New Delhi), 49(3), Jul 1977, 440-447. Engl.

In 1963, the Swedish Red Cross established a sheltered workshop providing industrial training and employment for the physically handicapped (especially former leprosy patients) in Gudiyatham Taluk, North Arcot District, Tamil Nadu, India. Six years later, the workshop had attained economic viability and was incorporated into a trust called the Workshop for Training and Rehabilitation of the Handicapped (WORTH). This paper describes the four units presently managed by the trust, the benefits accrued to and by the workers, and the future directions of this successful venture. (HC-L)

5846 **MacDougall, J.** *Oxfam project RHO—34.* Central African Journal of Medicine (Salisbury), 24(9), Sep 1978, 192-195. Engl.

The history of outreach health services provided by the Silveira Hospital, Bikita, Rhodesia, is traced. After a disastrous 1972 measles epidemic, health scouts were trained to provide immunization, nutrition assessment, and medicines at cost to children in outlying villages and to refer serious cases to one of 23 baby clinics. In 1974, Oxfam undertook the financial support of this programme. Problems presently faced by the programme after the withdrawal of the founding physician are discussed and recommendations concerning funding, incentives, and the sale of medicines are given. (DP-E)

5847 **Marsh, B.** *Community health outreach.* Saving Health (London), 18(2), Jun 1979, 11-13. Engl.

The community health services in the Ganjam district of Orissa, India, which also contains a population of Tibetan refugees, are described. Originally these services consisted of a dispensary and a 10-bed hospital, neither well-stocked with drugs, but later a training programme for village health workers was also undertaken by the hospital staff and health teams were sent to villages in the surrounding areas. The efforts of voluntary health workers in the region and a correspondence course in hospital administration that the author was undertaking are also discussed. (DP-E)

5848 **Ojo, M.O.** *Oguntolu family health clinic of the Institute of Child Health, University of Lagos.* Nigerian Nurse (Lagos), 10(3), Jul-Sep 1978, 20-23. Engl.

The Oguntolu family health clinic, serving a population of 30 000 in a semi-rural area near Lagos, Nigeria, is staffed by a physician, nurses, and clinical assistants whose training is described. The clinic's routine is outlined. Its major activities include preventive health services, health education, family planning, food demonstration classes, and curative services for both children and adults. A survey revealed that the patients are well satisfied with the nurses, who provide most of the services. The author, herself one of the nursing sisters, points out that the clinic cannot function properly unless it is backed up by a hospital, a laboratory, and an X-ray unit. (DP-E)

5849 **Ordóñez Carceller, C., Casal Sosa, A.** *Participación activa de la comunidad en el nuevo modelo de atención primaria. (Active participation of the community in the new primary care model).* Revista Cubana de Administración de Salud (Havana), 4(3), Jul-Sep 1978, 251-259. Span. 9 refs.

The Cuban population has participated passively in health programmes since the Revolution. Socialist thinking, however, envisions a more active popular role in health services planning, implementation, and evaluation. This paper discusses the strategy by which the *Plaza de la Revolución* community teaching polyclinic educated and motivated local communities to participate in their health services through their people's health councils—bodies that meet once a month to allow community health representatives to make their opinions, criticisms, and suggestions known to polyclinic directors and staff. (HC-L)

5850 **Pardo de Travera, M., Saturay, G.V., Marfit, L.P., Jose, L., Garilao, J.** *Supervised community participation.* Philippine Journal of Nursing (Manila), 48(3), Jul-Sep 1978, 79-83. Engl.

A team of Philippine health workers present their findings on the prevention and treatment of tuberculosis in this model of a community-based health programme. Community health workers were trained to act as health promoters, administer BCG vaccinations, examine patients with productive coughs, collect sputum, prepare and examine smears, supervise treatment, and give injections of streptomycin. The treatment programme, which lasted an average of 6 months, is discussed and evaluated. (DP-E)

5851 **Plant, J., Ames, S.** *Emergency/outpatient satellites serve as rural outposts.* Hospitals (Chicago, Ill.), 52(5), 1978, 87-92. Engl.

The need for emergency medical facilities in a rapidly growing area of New Hampshire, USA, prompted the establishment of two hospital-affiliated satellites, which are a sort of outpatient clinic. Both are located in doctors' buildings and are equipped to perform most procedures normally done in a hospital emergency department and provide such outpatient services as physical, respiratory, and speech therapy. This paper

discusses the administration, staffing, operation, financing, and impact of the satellites. (HC-L)

5852 **Provincial Institute of Maternal and Child Health Care, Kwangchow, China PR.** *Rural child health care in Kwangtung province.* Chinese Medical Journal (Peking), 4(2), Mar 1978, 85-88. Engl.
Fifteenth International Congress of Pediatrics, New Delhi, India, Oct 1977.

The rural child health care service in Kwangtung Province, People's Republic of China, is described. The service is staffed mainly by barefoot doctors, midwives, and health aides. Its main activities include dissemination of health knowledge for better environmental sanitation, proper management of the newborn, instructions on infant feeding, immunization against infectious diseases, and treatment of common diseases using a combination of Western and traditional Chinese medicines. Surveys have shown marked decreases in the incidence of poliomyelitis, encephalitis, measles, and malnutrition. (DP-E)

5853 **Quesada, M.L.** *Primary health care project of the Philippine Nurses Association.* Philippine Journal of Nursing (Manila), 48(3), Jul-Sep 1978, 69-76. Engl.

In 1977, the Philippine Nurses Association set up a primary health care project in a rural community to provide health education, primary care and referral services, and opportunities to promote local initiatives. This article discusses the project's guiding principles, its objectives, the selection and preparation of the community, the results of the community diagnosis, the community health activities, the training of the *barangay* health workers, and follow-up and evaluation. (DP-E).

5854 **Reid, D.B.** *Aboriginal Medical Service, Perth, western Australia.* Medical Journal of Australia (Sydney), 1(1), 14 Jan 1978, 53-55. Engl.

The history of an Aboriginal health service based in Perth, Australia, is traced from 1972. The organization of the clinic, the staff, and the medical services they provide are described. Health maintenance projects sponsored by the service include the subsidized sale of fruits and vegetables, the "flying grandmother" welfare service that provides short-term surrogate mothers, immunization, medical liaison officers, health education films in the waiting room, and alcohol abuse rehabilitation. Conditions in the Perth area are compared to those in the Northern Territory. (DP-E)

5855 **Sutter, E.E., Ballard, R.C.** *Community approach to trachoma control in the northern Transvaal.* South African Medical Journal (Capetown), 53(16), 22 Apr 1978, 622-625. Engl. 9 refs.

Trachoma represents the largest single cause of preventable blindness in the black population of the northern Transvaal. Epidemiological and cultural considerations indicate the need for community involvement in trachoma control at the household level. Involvement of the community by means of groups of volunteer health workers (care groups) has proved to be effective and acceptable to the local inhabitants. These groups, which form part of the comprehensive health system, integrate trachoma control into the primary health care activities of the area. Statistical data are included. (Modified journal abstract)

5856 **Taha, S.A.** *Comprehensive child health care centres in the Sudan.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 72(4), 1978, 333-337. Engl. 12 refs.

This paper describes the authors' experience in applying David C. Morley's concept of the under-fives clinic in Omdurman, Sudan, where existing maternal child health services were involved in the scheme. It was found necessary to establish a major centre to develop a methodology and train staff. The major differences from the original concept were the use of more professional staff and greater emphasis on nutrition education. While Morley's concept provides a system of comprehensive health care suitable to developing countries, the authors' experience showed that it could be difficult to implement because of the high initial and running costs and the long established dichotomy between curative and preventive medicine. (DP-E)

5857 **Taylor, J.** *Eye in leprosy.* AFYA (Nairobi), 13, Mar-Apr 1979, 38, 40-43, 45. Engl.

With the advent of cheap and effective drugs and powerful anti-inflammatory agents, blindness due to leprosy can be avoided in the vast majority of patients. Only three aspects of the eye are of practical importance: the mobility of the eyelids, the sensitivity of the cornea, and inflammation of the uveal tract and its results. The diagnosis and treatment of each of these conditions are discussed. Two essential diagnostic tests are whether or not the patient can fully close his eyes and whether or not his pupils fully dilate. (DP-E)

5858 **Taylor, J.** *Pinhole test.* AFYA (Nairobi), 13, Jan-Feb 1979, 18. Engl.

A simple test that health auxiliaries can use to test eye patients for refractive error is described. After determining that the patient has a real loss of visual acuity by using an eye chart, the auxiliary can conduct a further test by holding a card with a pinhole aperture in front of each of the patient's eyes. If his vision improves, the loss of acuity is due to refractive error and he needs glasses. If his vision gets worse, the loss is due to an opacity in the ocular media or some defect in the retina. Instructions for carrying out further tests are given. (DP-E)

5859 **Thorstenson, M.A.** *Field nursing in Nepal.* Australian Nurses Journal (Port Adelaide, Australia), 8(4), Dec 1978, 25-26. Engl.

A nurse describes her experiences as a team leader in the Thomas A. Dooley Foundations' Ghorka Field Project in Nepal. The project sponsored a combined immunization, health survey, health education, and limited clinical care programme, with emphasis on providing DPT vaccinations for children up to the age of 5 years. The author discusses some of the problems encountered in overcoming local prejudices against injections and misunderstandings about preventive medicine as well as the difficulties of carrying out her duties under primitive conditions. The activities of a typical day included referral, draining abcesses, dressing wounds, lecturing against smoking, teaching mothers to prepare rehydration fluid and a food supplement, and prescribing medicines. (DP-E)

5860 **Webber, R.H.** *Guadalcanal earthquake.* Tropical Doctor (London), 8(3), Jul 1978, 160-162. Engl.

Emergency measures taken after the Guadalcanal earthquake (Solomon Islands) are described. The 1st phase was a rapid survey of the area to locate the injured. In the 2nd phase, the injured and those in danger (1 328 total) were evacuated. The 3rd phase was to supply food and instruct the people in a simple filtering system for boiling water. The existing rural health services provided the necessary continuing care during resettlement, including advice on village siting and water supply and energetic treatment for the minor outbreaks of gastroenteritis. (DP-E)

III.3 Mobile Units and Services

5861 **Ayanru, J.O.** *Place of mobile clinics in eye care delivery in Nigeria (experience in Bendel state).* Nigerian Medical Journal (Lagos), 8(4), Jul 1978, 331-336. Engl. Refs.

The author's experiences with a mobile eye unit in Nigeria from 1973-1976 are described. The drugs and equipment used in the unit, a converted ambulance, are listed. The staff comprised an ophthalmologist, two nurses, and a liaison officer. At each stop, 200-300 patients were screened and treated or referred to a hospital for complicated surgery. Eye conditions commonly found are discussed. The author suggests ways of improving the service and notes its advantages, which include accessibility, relative cheapness, opportunities for health education and research, etc. Statistical data are included. (DP-E)

5862 **Gilchrist, D.S., Papworth, P., Brooke, D.** *Surgical support of district hospitals by the East African Flying Doctor Service.* Journal of the Royal College of Surgeons of Edinburgh (Edinburgh), 23(3), May 1978, 159-161. Engl.

The East African Flying Doctor Service provides regular surgical visits to 24 hospitals scattered over an area in Kenya and Tanzania about the size of Western Europe. Each hospital is visited every 2 months by a team consisting of a pilot, a surgeon, an anaesthetist, and a theatre sister. They fly in a single- or twin-engined light aircraft 450-500 flying hours or 60 000 air miles annually. The aim of the service is to provide surgery of a metropolitan standard and moral support for isolated hospitals, each of which is linked to Nairobi by radio, so that the team knows roughly what operations are to be done and what equipment to carry. In 1976, the team performed 706 operations with 6 deaths (0.8% mortality). (DP-E)

III.4 Health Education

See also: 5677, 5683, 5797, 5804, 5814, 5939, 5944, 5964, 5969, 5971.

5863 **Backheuser, M.P., Kampel, M.M., Pereira da Costa, A.** *Community health education program.* Bulletin of the Pan American Health Organization (Washington, D.C.), 13(2), 1979, 124-130. Engl.

Brazil's community health education programme, begun in 1976, operates on the basis of active community participation by organizing local groups and encouraging them to discuss and attack health-related community problems. Each group is headed by a community member who has received special training. In its 1st year, the programme constructed 12 962 cesspools, purchased 9 596 filters, prepared 4 672 vegetable gardens, repaired 2 941 houses, established 2 071 refuse dumps, cleaned 2 716 streets and plots, vaccinated 65 872 people, and referred 22 025 others to health centres, physicians, or hospitals. By 1980 the programme is expected to be operating in half of Brazil's counties. (Modified journal abstract)

5864 **Bamisaiye, A., Ojo, M.** *Father's club: a new approach to community mobilization for health.* AFYA (Nairobi), 12, Sep-Oct 1978, 135, 137. Engl.

In 1976, the Institute of Child Health established its 1st Father's Club in Lagos, Nigeria. Because of Nigeria's male-dominated cultural patterns, men make most of the decisions concerning their children's health and clinic attendance and, consequently, health education programmes aimed solely at women are ineffective. The clubs are run by the fathers themselves, who elect officers and organize the proceedings. Club sessions usually start with a presentation on a selected health topic by a member of the clinic staff, followed by questions and discussions. Two important topics that receive continuous attention are breast-feeding and child spacing. (DP-E)

5865 **Barth, L. ed(s),** Costa Rica, Ministerio de Salud, Asociación Demográfica Costarricense, San José. *Salud para todos. (Health for all).*

San José, Ministerio de Salud. Span.

This annual publication, the 1st of which appeared in 1977, is intended for the Costa Rican public. It contains articles on health, hygiene, nutrition, child care, and sex education interspersed with stories, songs, recipes, games, and advice for agriculturalists. The text is simply written and illustrated by means of appealing photographs and line drawings. (HC-L)

5866 **Bertrand, J.T., Bertrand, W.E.** *Health education among the economically deprived of a Colombian city.* International Journal of Health Education (Geneva), 22(2), 1979, 102-112. Engl.

Vivamos Mejor, a health education programme designed for the lower socioeconomic groups in Colombia, consists mainly of 3-hour multimedia presentations on preventive medicine, nutrition, sex education, family planning, and child care. The results of an evaluation of this programme are discussed and presented as statistical data. They reveal that the programme did have a modest effect on the target population, in that some women who attended showed a better knowledge of modern health concepts and health hazards than those who did not. The need for further research into the design of health education programmes is stressed. (DP-E)

5867 **Bridgers, W.F., Kronenfeld, J., Charles, E.D., Goodson, L., Klapper, M.S.** *Health education in rural Alabama.* Biosciences Communications (Basel, Switzerland), 4(1), 1978, 51-58. Engl.

This paper describes the justification, organization, and content of a programme of health education undertaken in the predominately rural state of Alabama, USA. The programme focused on emergency and acute care (first aid), preventive dental practices, arthritis awareness, and cancer awareness and early detection, but its approach would be equally valid in the fight against any disease amenable to reasonably effective prevention or control. (HC-L)

5868 **Buie, C.** *Visual aids in rural health education.* Bloomington, Ind., PASITAM, Documentation and Analysis Center, PASITAM Design Notes No. 12, 1979. 1p. Engl.

A study of picture comprehension and preference among rural Ghanaians demonstrated that visual materials must be adapted to the perceptual capabilities of the audience; 41% of those tested using standard materials failed to get the intended message and some got the wrong message. Rural audiences can be distracted by extraneous details, confused by complex messages or unfamiliar representations, and distressed by the emotional overtones of certain colours. Since most visual messages for rural illiterates are planned by educated urban professionals and technicians, they should be pre-tested on a sample of the intended audience as part of the design and production process. (DP-E)

5869 **Cerqueira, M.T., Casanueva, E., Ferrer, A.M., Fontanot, G., Chávez, A.** *Comparison of mass media techniques and a direct method for nutrition education in rural Mexico.* Journal of Nutrition Education (Berkeley, Cal.), 11(2), Jul-Sep 1979, 133-137. Engl. 19 refs.

A pilot study in three rural areas of Mexico revealed that mass media techniques are equally as effective as direct methods of health education in transmitting the basic components of hygiene, health, and nutrition. The results are discussed and presented as statistical data. In general, the direct education group showed a 53% increase in their learning scores compared to 54% for the mass media group. (DP-E)

5870 **Clarke, W.D., Devine, M., Jolly, B.C., Meyrick, R.L.** *Health education, with a display machine, in the surgery.* Health Education Journal (London), 36(4), 1977, 100-103, 113. Engl. 11 refs.

An advertising display machine, used for displaying posters simultaneously, can be an effective medium for health education in a doctor's waiting room. Experiments with the machine showed that it was readily accepted by patients because it did not intrude on their privacy, as did a previous telephone-cassette project. A simple quiz revealed that a group who had been exposed to the device was better informed of the health concepts presented than a similar group who had had no contact with the machine. The display machine is reliable, cheap, and requires little or no maintenance. It could be used for health education in other areas such as bus stations, airports, etc., wherever there are captive audiences for short periods of time. (FM)

5871 **Fehrsen, G.S., Shasha, W., Simon, B.** *Use of traditional means of communication in an African community.* International Journal of Health Education (Geneva), 22(2), 1979, 122-124. Engl.

The results of an extremely successful pilot project that used songs as a medium for health education messages are described. New words, composed by a group of health workers, were set to traditional African melodies, which were then sung by costumed teams at selected public gatherings. Poetry, chanting, and dancing were also incorporated into these presentations. The songs made such an impact on their listeners, even after only one hearing, that they were still being sung months later. Plans are being made for a radio show and further song-writing workshops. (DP-E)

5872 **Griffiths, M., Kolasa, K., Voichick, J., Wallace, N.** *Nutrition education field experiences in Nicaragua.* Journal of Nutrition Education (Berkeley, Cal.), 9(3), Jul-Sep 1977, 118-120. Engl.

Advanced nutrition students from US universities spent 10 days in a rural Nicaraguan village assisting nutrition and health workers, weighing and measuring children, and attending a communal nutrition education meeting. The students reported that the main nutritional problems were ignorance about weaning foods and nutrition practices, inadequate energy intake by pregnant women and children, lack of food diversity, mismanagement of diarrhea, and high incidence of parasites. They recommended projects for increasing production of eggs and vegetables, means of communicating with illiterate populations, training for nutrition leaders, and construction of wells and latrines. (DP-E)

5873 **Kanaaneh, H.A.** *Communication networks in the Arab village: implications for health education.* International Journal of Health Education (Geneva), 22(1), 1979, 38-41. Engl. 15 refs.
Also published in French, German, and Spanish.

Suggestions for helping community health workers make contact with Arab villagers for health education purposes are presented. Families of recently released hospital patients are usually very open to visits from health educators, who can also find a ready-made male audience in the *diwan* or village guest house. Although there is no similar meeting place for women, they can be found at small family gatherings and contacted via traditional birth attendants. Two additional and unique mass communications channels are the Friday noon prayer meeting, which is often broadcast by loudspeaker throughout the village, and the folk songs that are a common feature of weddings and festivities. (DP-E)

5874 **Markie, J. Perl, S. ed(s).** International Planned Parenthood Federation, London, Committee for the Promotion of Aid to Co-operatives, Rome: *Common concern; a guide to collaboration between co-operatives and family planning associations in education for population awareness and responsible parenthood.* London, International Planned Parenthood Federation, Aug 1977. 32p. Engl.

The importance of responsible parenthood in controlling population growth is stressed in this joint IPPF/COPAC publication. Cooperatives and family planning associations should work together to provide family life education and heighten population awareness. The organization and structure of cooperatives and family planning associations are described. Coordination of their activities can occur at the national policy level, as well as in the provision of family planning facilities and in the education of populations. Practical examples of such coordination in India, Sri Lanka, Bangladesh, the Philippines, Africa, and Latin America are presented. (FM)

5875 **Matthews, C.M., Jesudasan, M.** *Leprosy health education project.* International Journal of Leprosy (Washington, D.C.), 46(3-4), 1978, 414-425. Engl.

As the 1st phase of a leprosy education project, a knowledge, attitude, and practice survey was carried out near Vellore, India. Results showed that patients have a greater knowledge of the causes and effects of leprosy than the general public. Both groups were generally unaware of the significance of the leprosy "patch" as an early sign of the disease. Patients showed a slightly positive attitude to leprosy, while the public's attitude was mostly negative. A total of 71% of the patients had had the disease for at least 5 years before seeking treatment; most preferred allopathic treatment, but 19% went to traditional practitioners. (FM)

5876 **Natino, N.B.** *Nutritionist's experiences in rural development.* Philippine Journal of Nutrition (Manila), 30(3), Jul-Sep 1977, 106-109. Engl.

A home management technician describes her experience in introducing new ideas about nutrition into rural Philippine communities resistant to change. To overcome the obstacles posed by local attitudes and entrenched traditional beliefs, she organized rural improvement clubs for *barangay* women. These clubs carried out nutrition-related activities such as preparing and serving indigenous foods, setting up piggery and poultry projects, planting fruits and vegetables, organizing a children's centre, etc. Some of the problems the author encountered are discussed. (DP-E)

5877 **Reyes, M.O., Valdecanas, O.** *Exposure to and use of nutrition press releases by community nutrition workers.* Philippine Journal of Nutrition (Manila), 30(2), Apr-Jun 1977, 51-58. Engl.

A questionnaire survey was conducted of 555 Philippine community nutrition workers (of whom 237 responded) to determine their level of exposure to nutrition press releases, the extent to which they used the releases, the relationship between exposure and use, and the information needs of these workers. The results are discussed and presented as statistical data. Almost all nutrition workers read the press releases, but they tended to be used only by older workers and those in supervisory positions. The workers indicated that they wanted more information on meal planning, general nutrition, and nutrition education. Radio was ranked as the best medium for disseminating nutrition information, followed by leaflets, magazines, newspapers, and television. (DP-E)

5878 **Rody, N.** *Things go better with coconuts—program strategies in Micronesia.* Journal of Nutrition Education (Berkeley, Cal.), 10(1), Jan-Mar 1978, 19-22. Engl. 13 refs.

A community nutrition education programme designed to discourage the consumption of soft drinks and reduce the incidence of dental caries in the Micronesian population is described. Comic strips and

posters encouraged the local inhabitants to drink coconut milk instead and the expenditure on soft drinks has decreased, although population numbers and the price of soft drinks have both risen. Another aspect of the programme involved one video tape showing respected local persons explaining the advantages of breast-feeding and another concerning the preparation of infant foods from local foodstuffs. The lower cost of local produce, pride in local tradition, and the visible example given demonstrably affected personal attitudes and eating habits. (DP-E)

5879 **Rubin, M., Rubin, W.V., Angiulo, S., Rubin, R.E.** *Instrument to measure effectiveness of oral health education curricula.* Journal of School Health (Columbus, Ohio), 48, Feb 1978, 108-110. Engl.

This article discusses the development of valid and statistically reliable instruments for measuring the effectiveness of oral health education curricula and the employment of these instruments in evaluating a specific education programme in oral health. The authors drew up two tests to evaluate the dental education programme taught to schoolchildren in Akron, Ohio (USA). The 1st measured whether or not the children's knowledge had increased and the 2nd assessed improvements in their oral health. Scores from the tests are included in the notes. (DP-E)

5880 **Sarn, J.E.** *Popular planning and radiophonic schools: Nicaragua's PRACS program.* Development Communication Report (Washington, D.C.), 27, Jul 1979, 4-5. Engl.

In April 1976, Nicaragua's ministry of health initiated an ambitious rural health community action programme (PRACS) designed to solve some of the country's major health problems. One important aspect of this programme, the popular planning protocol, helped health educators to implement awareness programmes, identify community leaders, and train and support community health workers. PRACS also introduced radiophonic schools that focused solely on health. These courses broadcast health education lessons that were accompanied by flipcharts available to community health workers. The 1st 10 lessons concerned pregnancy and the 2nd series of 6 was directed towards breast-feeding mothers. Unfortunately, the Nicaraguan civil war has curtailed these activities. (DP-E)

5881 **Shah, P.M.** *Nutrition education through domiciliary management of energy-protein malnutrition.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 15(7), Jul 1978, 228-232. Engl. 14 refs.

As part of a health education programme, integrated health and nutrition services were provided to all preschoolers and married women in the home by 29 part-time social workers in 60 villages in Maharashtra, India. The social workers' nutritional message was reinforced by the monthly weighing of the children and the visual impact of their growth charts, which were kept at home. A survey of 500 mothers after 1 year revealed an increased awareness and practice of good nutrition habits among the mothers themselves and also among mother substitutes, mainly older siblings. Some statistical data are included. (DP-E)

5882 **Tonon, M.** *Models for educational interventions in malnourished populations.* American Journal of Clinical Nutrition (Bethesda, Md.), 31(12), Dec 1978, 2279-2283. Engl. 27 refs.

Two educational models, their underlying assumptions, and their applicability to developing nations are examined. The 1st, the rational empirical model, is based on the premise that if people are told what is good for them, they will modify their behaviour accordingly. The 2nd, the normative reeducative model, assumes that people are continuously moving toward some goal and that this natural movement can be harnessed in the interest of health. The 2nd calls for cooperation between the health professionals, social and educational professionals, and the target group themselves; although more difficult to implement, it is deemed the more effective of the two. (HC-L)

III.5 Appropriate Technology

See also: 5667, 5672, 5819, 5858, 5995, 6018, 6126.

5883 **Bewes, P.C.** *Appropriate technology for surgery in district hospitals.* Journal of the Royal College of Surgeons of Edinburgh (Edinburgh), 23(3), May 1978, 161-164. Engl.

The surgical conditions most commonly presenting to rural hospitals are trauma, sepsis, and general conditions such as hernias and tumours. Because of shortages of personnel and facilities, the author, himself a surgeon, recommends that surgical staff rely mainly on simple, well-tried technology, make a proper selection of cases for surgery, and select appropriate workers to do the surgery. After 18-month training courses, medical assistants can be upgraded to the level of assistant medical officers, who can perform basic surgery. This training programme is described. All 35 students in the 1st class qualified in surgery. (DP-E)

5884 **Bollag, U.** *Why not saline nose drops?* Helvicta Paediatrica Acta (Basel, Switzerland), 33, 1978, 91-94. Engl. 9 refs.

Experiments in the Parish of St. James, Jamaica, have shown that mothers can be taught to prepare, store, and administer to their children a homemade sterile solution that successfully humidifies and clears their children's nasal passages during respiratory infections and prevents associated dehydration and weight loss. Each day, 3-5 drops of the solution, which consists of 1/2 litre of water boiled with a teaspoon of salt, are applied to the child's nostrils using a dropper, a straw, or a piece of clean cloth. This treatment is recom-

mended for developing country patients in place of more expensive and less effective cold remedies. (DP-E)

5885 Bollag, U. *Cup and spoon rehydration of children with acute diarrhoea.* Journal of Tropical Pediatrics and Environmental Child Health (London), 23(6), Dec 1977, 268-270. Engl. 18 refs.

Oral glucose-electrolyte rehydration of children with gastroenteritis was introduced in a Jamaican child care centre in 1975. Food was given from the onset if the child desired it. In all 19 children suffering from sporadic, unspecified diarrhea over a 9-month period, the diarrhea subsided in 1-2 days. The need to use a cup and spoon rather than a bottle and to administer small amounts of fluid continuously is stressed. If oral rehydration is introduced into the community, the mixture must be easily made from common household ingredients. Statistical data are included. (RMB)

5886 Chaturvedi, S.K. *Delivery pack for traditional birth attendants.* Lancet (London), 2(8080), 8 Jul 1978, 102. Engl.

The delivery pack described contains a piece of string, half a razor blade, cotton, gauze, and aqueous 1% iodine solution. The razor blade is wrapped in the gauze and the string and cotton are autoclaved. The iodine is contained in an autoclaved phial sealed with wax. All the items are put in a plastic bag and sealed. Traditional birth attendants in Jaipur, India, were instructed in the use of the pack, which has become so popular that 22 of the 38 *dais* in the area are using it. (DP-E)

5887 Isely, R.B. *Assainissement des sources d'eau par des moyens locaux: une contribution à la recherche d'une technologie "appropriée." (Purifying of water sources by local means: a contribution towards the implementation of an "appropriate" technology).* Annales de la Société Belge de Médecine Tropicale (Brussels), 58(2), 1978, 149-156. Fren. 12 refs.

In order to illustrate the concept of appropriate technology, the results of a bacteriological study of the drinking water obtained from 48 village springs in Cameroon are presented. The protection of 15 of these had been improved by local means exclusively, while 33 had not been arranged according to standard criteria. The water of 7 of the improved springs was judged potable by WHO standards, whereas only 3 of the unimproved springs gave satisfactory results. These results are encouraging for those involved in integrated rural development. Their significance for planning at the village level is briefly discussed. (Modified journal abstract)

5888 Manschot, P. *Storage of vaccines.* AFYA (Nairobi), 13, Jan-Feb 1979, 2-9. Engl.

This article discusses the storage needs of various vaccines and provides a self-testing exercise to see how well the reader has understood the storage rules. Dry, frozen vaccines, such as measles or BCG, must be kept in a freezer compartment, although the solvent used to reconstitute them does not require cold storage. The merits and problems of various types of refrigerators are examined. A handy chart tells how long dry, frozen measles, BCG, and smallpox vaccines, diluted DPT and poliomyelitis vaccines, and tetanus toxoids can be stored in a freezer compartment, inside a good refrigerator, and at room temperature. (DP-E)

5889 McCord, C. *Medical technology in developing countries: useful, useless, or harmful?* American Journal of Clinical Nutrition (Bethesda, Md.), 31(12), Dec 1978, 2301-2313. Engl. 48 refs.

In the past, researchers have raised serious doubts as to whether technology has anything to offer populations, as opposed to individuals. This paper gives a number of examples from different times and different countries where simple technological interventions, effectively applied, have resulted in significant reductions in mortality. It also points out how, of the frequently cited obstacles to their adoption (inadequate funds, public apathy, etc.), only one—indifference on the part of government and society to human suffering—is insurmountable. (HC-L)

5890 Menneson, M.J. *Value of some "charitable drugs."* Tropical Doctor (London), 9(1), Jan 1979, 42. Engl.

A pharmacist who examined four crates of drugs donated for use in clinics in Upper Volta notes that, of a total of 90 kg of medicines (the crates themselves weighed almost as much), 45 kg were out of date, 10 kg were useless (spoiled or dangerous), and 15 kg were so expensive that they were never commonly prescribed in rural health centres. Had the drugs been presorted, 20 kg instead of 90 kg would have been sent and the money saved could have been spent on more appropriate medicines available locally. The author recommends that charitable organizations concentrate on the quality and suitability, rather than the quantity, of drug donations. (DP-E)

5891 Morgan, P.R. *Recent developments in environmental sanitation and their role in the prevention of bilharziasis.* Central African Journal of Medicine (Salisbury), 23(11), Nov 1977, 11-15. Engl. 9 refs.

Bilharziasis, which is largely socially determined, might more rapidly be controlled if the community participated in disease control and environmental sanitation programmes. Consequently, there is a need for simple appropriate technology that the villagers can easily understand, install, and maintain. This article discusses the essentials of latrine construction and describes the construction of a self-flushing water seal and a ventilated pit privy. The instructions for

constructing a tapless hand basin and a simple water pump are also presented. (DP-E)

5892 **Pal, S.C.** *Simple solution; mothers in the villages of India are learning to prepare an oral fluid for children with diarrhoea that can save their lives.* World Health (Geneva), Feb-Mar 1979, 12-15. Engl.
Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

A study conducted in India using the oral rehydration fluid recommended by WHO, i.e., 3.5 g sodium chloride (table salt), 2.5 g sodium bicarbonate (baking soda), 1.5 g potassium chloride, and 20 g glucose dissolved in 1 litre of water, revealed that 92% of patients with moderate to severe dehydration responded well when they received repeated small amounts of the fluid (25-30 ml every 10-15 minutes). The success of this study led to the development of a cheap and simple system for dispensing the ingredients and a mass campaign to popularize the treatment. A practical programme for training village mothers to use this therapy has also been undertaken. (DP-E)

5893 **Seaman, J.** *Field methods for calculating anthropometric results.* Journal of Tropical Pediatrics and Environmental Child Health (London), 24(3), Jun 1978, 123-126. Engl. 10 refs.

This paper outlines ways in which small calculating machines can be used to speed up calculation of anthropometric indices, such as arm circumference:height ratios, which take a non-linear form. The methods described include nomograms, polynomials, and fitting straight lines, which can be used with reference to four common indices of nutritional status: weight:height, height:age, weight:age, and arm circumference:height. Statistical data are included. (DP-E)

5894 **Villar, J., Belizán, J.M., Delgado, H.** *Monitoring fetal growth in rural areas: an alternative utilizing nonprofessional personnel.* Bulletin of the Pan American Health Organization (Washington, D.C.), 13(2), 1979, 117-123. Engl. 18 refs.

This article describes a method that can be used by auxiliary health workers to monitor fetal growth in the patient's home. Its basic tool is a tape measure with coloured segments that indicate appropriate uterine heights for pregnant women at 6, 7, and 8 months of gestation; if the results are not normal the patient can be referred to a health centre. Other elements of the method include a system for scheduling home visits at appropriate times, a set of guidelines indicating courses of action to cover most contingencies, and a recording form. It is hoped that this method will help improve antenatal care in rural areas. Statistical data and a sample form are included. (DP-E)

IV Health Workers—Training and Utilization

IV.1 Medical Personnel

IV.1.1 Professional

See also: 5612, 5700, 5961.

5895 **Bates, D.G.** *Medical education in China after the Gang of Four.* Canadian Medical Association Journal (Ottawa), 120(12), 23 Jun 1979, 1578, 1581-1582. Engl.

Since the downfall of the Gang of Four in the People's Republic of China, medical education has shifted its emphasis to scientific and technological training rather than social action and service to the state. The physician's curriculum has been lengthened to 5 years from 3 and many doctors who graduated in the 3-year programme have been recalled for additional training. Great numbers of barefoot doctors are still being produced, but, despite the fact that they make excellent medical students, few of their communes will allow them to return to school. Efforts are still being made to integrate traditional and Western medicine. (DP-E)

5896 **Colditz, G.A., Elliott, C.J.** *Workload in rural practice; implications for education and health service structure.* Australian Family Physician (Jolimont, Australia), 7(5), 1 May 1978, 571-573, 575. Engl.

In view of the reported maldistribution of medical manpower in Queensland, Australia, this study was undertaken to examine the effects of such a maldistribution on the workload and range of tasks performed by rural physicians. Rural doctors were found to have a higher patient contact per week and to perform more surgery and obstetrics than do their urban counterparts. The implications for medical education and the health services structure are discussed. Statistical data are included. (DP-E)

5897 **Cook, G.C.** *Training of doctors and delivery of health care in developing countries.* Lancet (London), 2(8137), 11 Aug 1979, 297-299. Engl. 20 refs.

In the past 20 years, the training of doctors in developing countries has become confused with the delivery of health care. There should be a balance in the financial aid directed to urban and rural areas; at present, rural areas receive too much. The urban hospital, and especially the national teaching hospital, where most of the teaching, care of the seriously ill, and reserch are done, is in decline. In the training of doctors, the vital clinical approach, oriented towards the individual patient, is losing ground. The problem of attracting doctors to rural areas is also discussed. (Modified journal abstract)

5898 **Deschamps, J.P.** *Santé de la famille en Quart Monde: implications pour la formation des médecins. (Family health in the Fourth World: implications for physician training).* Revue de Pediatrie (Paris), 15(3), Mar 1979, 161-164. Fren.

Conventional Western medical education does not allow doctors to properly fulfill the health care requirements of the most underprivileged populations. On the contrary, a hospital-based education gives a false impression of these populations and their health. Medical studies will have to devote a greater role to the teaching of family and community health, the instruction of health requirement evaluation, extra-hospital education, and the provision of a truly participative public health education system. (Modified journal abstract)

5899 **Federación Panamericana de Asociaciones de Facultades de Medicina, Caracas.** *Boletín; Federación Panamericana de Asociaciones de Facultades de Medicina. (Bulletin; Pan American Federation of Associations of Medical Faculties).* Caracas, Federación Panamericana de Asociaciones de Facultades de Medicina. Span.

This quarterly publication presents regional and country reports of seminars, conferences, workshops, research, etc., of relevance to medical education in North, South, and Central America and the Caribbean. It also contains an annotated bibliography of recent literature on the subject. (HC-L)

5900 **Frost, O.** *Obstetric teaching in a community.* South African Medical Journal (Capetown), 54(22), 25 Nov 1978, 918-919. Engl.

A project initiated in a rural area of Rhodesia used 6th-year medical students to train the staff of rural hospitals and maternity units in updated techniques of obstetrics and delivery. The problems encountered in the different facilities are described and efforts made to overcome them discussed. By the end of the project, it was felt that the medical students had obtained a far

greater insight into the needs of the area and were better prepared to become hospital medical officers. It had also been demonstrated that repetitive teaching and frequent visits were needed to maintain an acceptable standard of service. This project was followed by a similar one in another area. (DP-E)

5901 **Hidalgo San Martín, A.** *Planificación de la enseñanza de la pediatría en la comunidad. (Planning community pediatric teaching).* Educación Médica y Salud (Washington, D.C.), 12(1), 1978, 47-58. Span.

Community pediatrics involves the study and management of the health of individuals, families, and collectivities and, as such, cannot be learned in a hospital. This paper examines the various aspects to be taken into consideration when planning a training programme in community pediatrics. (HC-L)

5902 **Joseph, S.C.** *Medical education for community health care: a plan for Wyoming; supplementary report.* Laramie, Wyo., University of Wyoming, Jun 1974. 56p. Engl.
See also entry 5903.

As a supplement to the January 1974 report, this document examines developments in Wyoming (USA) since January 1974 and further data relevant to the study of medical education in that state. Part 2 deals with prospects related to the major options of the original report, including the comprehensive system, contracts with out-of-state medical schools for admitting Wyoming residents, and family practice residency training in Wyoming. Recommendations concerning medical education in Wyoming are presented in part 3. Appendices cover pertinent legislation. Statistical data are included. (RMB)

5903 **Joseph, S.C.** *Medical education for community health care: a plan for Wyoming; preliminary report.* Laramie, Wyo., University of Wyoming, Jan 1974. 125p. Engl. Refs.
See also entry 5902.

The 1st two chapters of this report propose a plan for a comprehensive system of medical education for Wyoming (USA). The next six chapters explain the recommended programme in detail and survey alternate educational possibilities; topics covered include objectives of a medical education programme, projected costs, capital development requirements and costs, and a developmental timetable. The last chapter reviews current issues in medical education and health care in the USA and Wyoming as they apply to the above-mentioned programmes. Appendices contain related health legislation. (RMB)

5904 **Katz, F.M., Fülöp, T. ed(s).** *Personnel for health care: case studies of educational programmes; volume 2.* Geneva, WHO, WHO Public Health Papers No. 71, 1980. 202p. Engl.

This paper presents case studies of health manpower training programmes from 13 developed and developing countries that are innovative either because they have been specifically designed to meet the needs of the communities they serve or because they are endeavouring to instill in their students a problem-solving approach to health care. Examples include training programmes for public health nurse practitioners in Thailand, health extension officers in Papua New Guinea, midwives in Togo, various levels of dental personnel in Colombia, and physicians in the Democratic Republic of Yemen and other countries. (HC-L)

5905 **Lathem, W. ed(s).** Rockefeller Foundation, New York. *Future of academic community medicine in developing countries.* New York, Praeger Publishers, Praeger Special Studies, 1979. 212p. Engl. Refs.
Rockefeller Foundation Conference, Bellagio, Italy, 11-14 Apr 1978.

Part 11 of this book, called issues and perspectives, contains a series of definitive articles that explore and analyze various aspects of community medicine and related matters. These are divided into five groups: the setting, health in general context, the health system, manpower, and assessment. These considerations provide a setting for the principles and recommendations presented in part 2, which examines the relationship of community health to social, developmental, political, and economic factors and makes suggestions concerning research, education, curriculum, staff, institutions, and future prospects. (RMB)

5906 **Martin, J.F.** *Family health and family planning in medical education.* Tropical Doctor (London), 9(2), Apr 1979, 85-88, 92. Engl. Refs.

This paper presents concepts and guidelines for teaching family health (of which family planning is an important element) that were developed in recent years in medical schools in Southeast Asia and Africa. The reasons for making maternal child health a priority in developing countries are examined and the implications for medical education discussed. Recommendations for improving the curriculum include adding a family health/family planning block teaching period in the last year, assigning each student a family to care for, field work, accustoming the students to working with a health team, and examinations. (DP-E)

5907 **McGaghie, W.C., Miller, G.E., Sajid, A.W., Telder, T.V.** *Competency-based curriculum development in medical education; an introduction.* Geneva, WHO, WHO Public Health Papers No. 68, 1978. 91p. Engl. Refs.

The authors emphasize the processes involved in curriculum development for medical education. After identifying three models, the remaining chapters are devoted to a competency-based curriculum, organized

around the functions required to practice medicine in a given area. Chapter 2 describes the elements needed to define such functions, including self-reports, peer or supervisory observations, task analyses situation, models, etc. Chapter 3 discusses duration of medical courses and sequence of studies, emphasizing the concept of mastery learning, or reaching educational objectives at an individual pace. Chapter 4 deals witn evaluation techniques and the final chapter examines the preparation of teachers and students for these new approaches to education. (FM)

5908 **Monintja, H.E., Karjomanggolo, W.T., Sutejo, R.** *Postgraduate pediatric training programme in the Department of Child Health, Medical School, University of Indonesia, Jakarta; (general outline of the curriculum).* Paediatrica Indonesiana (Jakarta), 18(1/2), Jan-Feb 1978, 24-30. Engl.
Second Asian Congress of the Association of Paediatric Societies of the South East Asian Region (APSSEAR), Jakarta, Indonesia, 3-6 Aug 1976.

The content, objectives, and methodology of the postgraduate pediatric training programme in the Department of Child Health of the University of Indonesia Medical School are described. In addition to formal study, those physicians who qualify for the programme are expected to complete another 40 months of specialized on-the-job training and carry out research leading to three scientific papers. The trainees are continuously evaluated by a team of supervisors. The course aims to produce pediatricians who are attuned to the child health needs of Indonesia and capable of working with and training other members of the health team. (DP-E)

5909 **Moretto, R., Pessanha, E., Dutra, M., Duncan, C., Costa, M.** *Experiência didática em pediatria. (Educational experience in pediatrics).* Jornal de Pediatria (Rio de Janeiro, Brazil), 44(3), 1978, 186-188. Portuguese.

The utilization of instructional models (programmed learning) is one way of minimizing teacher shortages at the university level. The Campos medical school, Brazil, tested 13 such models on 5th year pediatric students with very positive results in terms of acceptability and student performance. The models covered child growth and development, nutrition, and infectious and parasitic diseases and included slideshows, group discussions, and clinical demonstrations. This paper describes the models, the evaluation methodology, and the evaluation results. (HC-L)

5910 **Simette, C.H.** *Expanded social paediatrics perspective for developing countries.* Courrier (Paris), 28(3), 1978, 227-232. Engl. 13 refs.

In developing countries, social pediatrics should be an essential element of postgraduate pediatric education. A social pediatrics curriculum that is designed to be relevant to the needs of child health specialists in these nations is presented. It emphasizes the development of a better perception of those social forces that influence child health and the acquisition of skills in communication and administration. Pediatricians and departments of pediatrics in developing countries have a responsibility to maintain a leadership role in strengthening the teaching of social pediatrics. (DP-E)

5911 **WHO, Copenhagen.** *Education and training of public health medical officer; report on a working group.* Copenhagen, WHO, 1977. 34p. Engl. Refs.
Working Group on the Education and Training of Public Health Medical Officers, Copenhagen, Denmark, 23-25 Feb 1976.

The group examines the utilization and training of public health medical officers in the WHO European region. The role of the public health officer differs according to the health care system in each country. Training programmes available in each country are outlined and the role of independent research in educational programmes is stressed. Leadership training and educational policy and planning are also discussed. A chapter on training institutions examines the organization and administration of public health schools and their relationship with health services. The final chapter summarizes the changing role of public health officers and the implications for training. (FM)

5912 **WHO, Geneva.** *Planning of schools of medicine; report of a WHO study group.* Geneva, WHO, WHO Technical Report Series No. 566, 1975. 43p. Engl.

This report considers a systems approach to the planning of medical training centres that emphasize the importance of multiprofessional health teams. The reasons for establishing a new medical school are discussed and the objectives of such institutions outlined. Chapter 3 describes the planning process, including feasibility studies, staff training, departmental structure, budgetary allocation, curriculum development, and student selection. Chapter 4 examines basic physical plant considerations, such as location and types of facilities needed. Chapter 5 outlines a model planning timetable and the final chapter examines methods of evaluating the educational programme, student progress, and quality of teaching. (FM)

5913 **WHO, Geneva.** *Training of research workers in the medical sciences.* Geneva, WHO, 1972. 186p. Engl.
CIOMS Round Table Conference, Geneva, Switzerland, 10-11 Sep 1970.

The Council for International Organizations of Medical Sciences (CIOMS) organizes round table conferences to enable the scientific community to express its views on topics of immediate concern, unhampered by

administrative, political, or other considerations. In this case, the topics include the role of the university and the research institute in the scientific training of research workers, special problems in the training of research workers in the biological and medical sciences, the situation of some developed and developing countries *vis-à-vis* the brain drain, and new mechanisms for international cooperation in research training. This report presents the papers and discussions from the conference but no conclusions or recommendations. (HC-L)

IV.1.2 Auxiliary

See also: 5603, 5619, 5622, 5834, 5836, 5850, 5883, 5895, 5904, 5918, 5963, 5979, 5980, 5981, 5985, 6005, 6041.

5914 **Evans, W.** *Individualized instructional system for paramedic training programs.* Emergency Medical Services (Sherman Oaks, Cal.), 8(2), Mar-Apr 1979, 34-36, 38-39. Engl.

The proposed training method for teaching paramedics is based on the premise that instructional theory should derive from an understanding of individual differences. Instructions are given for constructing a training course of limited, moderate, or extensive individualization, including such elements as teaching materials, media, mode and method, group size, length of class period, in-class time, evaluation, sequence of learning experiences, motivation for learning, pace, sequential progress, study place, feedback to learner, pupil learning activity, and staff utilization. A flowchart depicts a management plan for such a system. (DP-E)

5915 **Ghoshal, B.C.** *Community health workers scheme with particular reference to their training.* Indian Journal of Public Health (Calcutta, India), 22(3), Jul-Sep 1978, 265-270. Engl.

The 1st phase of India's community health worker scheme was inaugerated in 1977 in 777 primary health centres. The scheme called for each community of 1 000 persons to select one individual for 3 months training, to be undertaken in the primary health centre by a multidisciplinary team, in basic health care, preventive medicine, yoga, and naturopathy. This paper briefly outlines the intended procedure for selecting, training, supervising, equipping, and evaluating the community health worker. (HC-L)

5916 **Mashalaba, N.N.** *Contact with the community.* World Health (Geneva), Feb-Mar 1979, 28-31. Engl.
Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

Botswana's family welfare educators (FWEs) working in maternal child health belong to the community they serve and are selected by the village itself. The ideal ratio is 1:500-1 000 people. Their duties include health and nutrition education, first aid, case-finding, antenatal care and delivery assistance, immunization, and liaison with the established medical services. As a result of their activities, attendance at prenatal clinics rose from 40% in 1973 to 70% in 1977 and, in the same year, 65% of deliveries took place with trained supervision. Their success is attributed to their close communal bonds and their familiarity with local customs, language, and life style. (DP-E)

5917 **Werner, D.B.** *Village health worker: lackey or liberator?* Palo Alto, Cal., Hesperian Foundation, 1977. 16p. Engl.
International Hospital Federation Congress Sessions on Health Auxiliaries and the Health Team, Tokyo, Japan, 22-27 May 1977.
Unpublished document.

The author evaluates the utilization of village health workers in Latin America. The degree of local participation and community support for health programmes varied greatly, generally decreasing according to the extent of government involvement. The influence of the attitudes of professional health workers and of sociopolitical factors on the training and functions of village health workers are also discussed. The author outlines some of the disadvantages of foreign aid and concludes by recommending changes in the primary health care system to increase the role of auxiliary health workers and decrease the importance of professionals. (FM)

IV.2 Nursing Personnel

IV.2.1 Professional

See also: 5613, 5622, 5691, 5904, 5974, 5975, 5978.

5918 **Briggs, R.M., Schneidman, B.S., Thorson, E.N., Deisher, R.D.** *Education and integration of midlevel health-care practitioners in obstetrics and gynecology: experience of a training program in Washington State.* American Journal of Obstetrics and Gynecology (St. Louis, Mo.), 132(1), Sep 1978, 68-77. Engl. 12 refs.

The impetus for the Gynecorps Training Program was the identification of medically underserved women in Washington State (USA) and their need for preventive health care, the maldistribution of physicians, and the success of a similar pilot programme in 1972. This programme trains community-based and -sponsored registered nurses and physician's assistants as women's health care specialists with the goal of delivering preventive care in obstetrics and gynaecology to high risk, low income, and underserved women. A summary of the training programme, its curriculum, and the integration of its graduates into the community are presented and discussed. (Modified journal abstract)

5919 **Chye, T.C.** *Home nursing care for the aged and chronic sick.* Nursing Journal of Singapore (Singapore), 18(2), Nov 1978, 66-67. Engl.

Because of the shortage of hospital beds for chronically ill patients, the Home Nursing Foundation was

inaugurated in Singapore in December 1976 to provide home nursing for the aged and chronic sick. In 1977, 60 full-time nurses cared for 1 361 patients, making a total of 32 090 home visits. While their salaries are paid by the government, medicine, equipment, and food for the patients are financed by donations to the Foundation. These nurses feed and bathe the patients, dress wounds, administer injections, supervise medication, rehabilitate stroke patients, and oversee discharged psychiatric patients. Some of the Foundation's problems include lack of funds and the care of elderly patients who have no families to assist them. (DP-E)

5920 **Curtin, L.L.** *Nursing ethnics: theories and pragmatics.* Nursing Forum (Chicago, Ill.), 17(1), 1978, 4-11. Engl.

Courses in ethics for nurses should concentrate on the ethical dimension of nursing, rather than on issues, by explaining the nature of a nurse's commitment to her patient. An understanding of basic human rights and responsibilities and the ability to weigh possible results of various actions are equally applicable to nursing. Conscience provisions, assuring personal accountability, should be included in nursing practice acts, but they must be supported by the general public and by others in the health care system. Finally, nurses have a moral obligation to suport their professional associations whose responsibilities include assuring the quality of nursing care and protecting individual practitioners. (FM)

5921 **Devi, S.** *New health care systems.* Nursing Journal of Singapore (Singapore), 18(2), Nov 1978, 70-71. Engl.

This article examines some of the innovations introduced by developing countries to bring health care to their local areas. In Thailand, nurses, midwives, sanitarians who have 1 year extra training, and paraphysicians called *Wechakorns* have been introduced into provincial health centres. In western Australia, nurses are working as "junior hospital officers" in support of the two local doctors. In 1973, a programme was introduced in Trinidad and Tobago to train experienced psychiatric nurses as mental health officers. Nurse practitioners are being trained in Singapore to diagnose and to treat chronic patients, thus freeing physicians for more serious cases. (DP-E)

5922 **Lee, K.S.** *Nursing in primary health care.* Philippine Journal of Nursing (Manila), 48(3), Jul-Sep 1978, 64-68. Engl.

The restructuring of nursing roles and reorientation of educational programmes for nurses are urgently required in order for nurses to make their most effective contribution to the maternal child health, health education, preventive, and rehabilitative activities that are the heart of primary care. Nursing must be less hospital- and disease-oriented and more concerned with community health. The implications of this reorientation for the provision of direct care, supervision, and administration are examined and the need for research in this area is stressed. (DP-E)

5923 **Leininger, M.** *Transcultural nursing: concepts, theories, and practices.* New York, John Wiley, Wiley Medical Publication, 1978. 532p. Engl.

Designed as a text for nursing students, this book presents a theoretical framework for the study of transcultural nursing, incorporating cultural concepts into nursing education. Part 1 outlines the historical development of this field and describes various research approaches. Part 2 examines the importance of culture in nursing care practices and the need to recognize cultural differences and similarities. The articles in part 3 reflect the findings of transcultural nursing field studies in the USA and other countries. Part 4 studies curriculum development to encourage the inclusion of cultural concepts in training programmes. A model course outline and a comprehensive bibliography are included. (FM)

5924 **Mooneyhan, E.** *Professional nurse in developing countries—practice and preparation.* International Nursing Review (Geneva), 26(1), Jan-Feb 1979, 17-20, 23. Engl. Refs.

Because the nurse in a developing country is often called upon to assume responsibilities beyond those of her traditional role, her training should foster an ability for independent action based on sound judgment, adequate knowledge, and suitable skills. This paper discusses these requirements and sets forward 15 objectives that an appropriate nursing curriculum for a developing country should meet. (HC-L)

5925 **Soffer, A., Rainer, L.** *Nursing in the People's Republic of China.* Heart and Lung: the Journal of Critical Care (St. Louis, Mo.), 7(6), Nov-Dec 1978, 980-986. Engl.

A US doctor and nurse describe their visit to the People's Republic of China, where they observed the delivery of health care in the major hospitals and teaching centres of three cities and in other areas such as collective farms and factory clinics. Particular attention is paid to the training and functions of nurses, which vary according to location, although most nurses receive 3 years of nursing training after completing 10 years of general education and many then receive additional on-the-job training. They note that efforts are now being made to reopen nursing schools and to increase the training time to more closely resemble the standards existing before 1966. (DP-E)

IV.3 Midwives and Family Planning Workers

IV.3.1 Professional

See also: 5613, 5904, 5986.

5926 **International Federation of Gynaecology and Obstetrics, London. International Confederation of Midwives, London.** *Maternity care in the world; international survey of midwifery practice and training. 2 edition.* Southampton, UK, Worthy Publications, 1976. 590p. Engl.

Information on vital rates, numbers of medical and midwifery personnel, midwifery legislation, midwifery training and practice, hospitals and other facilities, and family planning services for some 210 countries are presented, along with recommendations arising from this and previous meetings of the International Federation of Gynaecology and Obstetrics and the International Confederation of Midwives. This edition updates the previous report, which was published 10 years earlier. The results of the most recent joint meeting are also presented. (HC-L)

IV.3.2 Auxiliary

See also: 5613, 5619, 5829, 5886, 5926, 5977, 5982.

5927 **Mundo, F. del, Morisky, D.E., López, M.E.** Institute of Community and Family Health, Quezon City. Hilot *in transition; integrating family planning and birth attending.* Quezon City, Ateneo de Manila University Press, 1976. 63p. Engl. Refs.

Because 60%-90% of Filipino births are attended by *hilots*, the Institute of Maternal Chiid Health organized a *hilot* training programme to teach prenatal care and postnatal care and proper delivery procedures. As an experiment, family planning was also part of the training programme. Three studies, conducted in Marinduque, Camarines Norte, and Oriental Mindoro from 1971-1974, demonstrated that *hilots* are eager to cooperate in family planning motivation provided that they are properly trained, considerately supervised, and adequately compensated for their efforts and expenditures. This document describes the training programme and the *hilot*'s role in birth attending and family planning. (DP-E)

5928 **Opilas, E.A.** *Traditional health workers finally earn recognition.* Initiatives in Population (Manila), 3(3), Sep-Dec 1977, 38-44 Engl.

In the 1950s, the Philippines started its 1st government-sponsored training programme for some 9 000 selected *hilots* or traditional midwives. A 1974 survey identified more than 31 000 *hilots*, 84% of them female, and their training has now been incorporated into the regular health services. *Hilot* training programmes have also been sponsored by organizations in the private sector; the example of the Marinduque project is given. Recently, family planning was incorporated into *hilot* training. Teaching materials and audiovisual aids that have been used in various courses are discussed. (DP-E)

IV.4 Dental Personnel

IV.4.1 Professional

See also: 5904, 5932, 5975.

5929 **Becerra Troya, M.** *Nuevo plan de estudios de estomatologia en la Universidad de La Habana. (New study plan in stomatology at the University of Havana).* Revista Cubana de Estomatologia (Havana), 12(1-2), Jan-Aug 1975, 13-17. Span.

In 1970, the school of stomatology, University of Havana, Cuba, reorganized its teaching programme to better prepare dentists to function within the health system and meet the rising demand on the part of a more educated public for dental services. The new programme featured combined work/study, decentralized teaching, integrated subject matter, and an objective-oriented approach. These four characteristics are briefly elaborated in this paper. (HC-L)

5930 **Cabarrus P., J.F., Pómes, C.E., Morán, E.A., Gereda, R.** *Programas de ejercicio profesional supervisado y de promotores rurales de salud oral en Guatemala. (Programmes for supervised professional practice and for rural oral health promoters in Guatemala).* Educación Médica y Salud (Washington, D.C.), 12(4), 1978, 361-391. Span. 18 refs.

San Carlos University, Guatemala, offers two programmes featuring university/community cooperation: supervised professional practice, whereby dental students spend their entire final year (8 months) practicing in rural towns under periodic supervision from their professors, and a programme for the training and deployment of rural oral health promoters. This paper describes both programmes in detail and discusses their accomplishments, limitations, and implications within the socioeconomic context of this developing country. Statistical data are included. (HC-L)

5931 **Jiménez Navas, H., Cova Rey, R., Arango, A.** *Laboratorios de comunidad como instrumentos para la investigacion cientifica de salud y sociedad en Venezuela. (Community laboratories as tools for scientific research into health and society in Venezuela).* Educación Médica y Salud (Washington, D.C.), 12(4), 1978, 392-409. Span. 11 refs.

From 1970-1972, the school of dentistry of Zulia University, Maracaibo, Venezuela set up five community laboratories to investigate alternative solutions to improving the productivity, lowering the cost, and increasing the coverage of dental services. This paper describes the philosophy behind the laboratories, gives an example of the type of methodoloy being developed in them, and discusses their effect on student learning and attitudes. (HC-L)

IV.4.2 Auxiliary

See also: 5904, 5930.

5932 **Brown, E.M.** *Dental health and the development of health services in Africa.* In AFRO Technical Paper No. 11, Brazzaville, WHO, 1978, 7-33. Engl. Refs.

The author examines three aspects of dental health in Africa: epidemiology, functions of dental health personnel, and manpower development. In the 1st section, he discusses the prevalence of dental caries and periodontal disease in different socioeconomic groups. A 2nd chapter outlines the categories of personnel, including the dental surgeon, hygienist, school dental nurse, clinical dental auxiliary, and laboratory auxiliary. Their duties are listed and the importance of the dental auxiliary in health education is stressed. The final chapter covers the planning of training programmes to reduce Africa's reliance on foreign-trained personnel. (FM)

IV.6 Environmental Health Workers

See also: 5946.

5933 **Cassel, J., Cheradame, R., Goldsmith, J.R., Ham, J.M., Harrington, J.J.** *Education and training of engineers for environmental health.* Geneva, WHO, 1970. 152p. Engl.

The term "environmental engineering" was developed to replace the more limited disease-oriented notion of "sanitary engineering." It is defined as "the application of engineering principles to the control, modification, or adaptation of the physical, chemical, or biological characteristics of the environment in the interest of the health, comfort, and social well-being of man." Its practice is based on a systems approach, i.e., one concerned with the management of a resource as a whole, not just a single aspect of it. These concepts are expanded in a number of essays that, together, constitute guidelines for the training of the kind of engineer who will be needed in environmental health in the late 20th century. (HC-L)

5934 **Rojas, R.M.** *CIDIAT experience on water resources knowledge transfer in Latin America.* Mérida, Venezuela, Interamerican Center for the Integral Development of Land and Water Resources, n.d. 7p. Engl.
Unpublished document.

The report describes the activities of the Interamerican Centre for the Integral Development of Land and Water Resources (CIDIAT) in Venzuela. With primary emphasis on training, the centre offers seminars, short courses, and longer national or regional courses providing training in specific disciplines. Since January 1973, the centre has also offered a graduate programme in the areas of soils and irrigation, irrigation and drainage, hydrology, hydraulic structures, water resources planning, and water resources development. This programme has resulted in an increase in the centre's research activities. The centre's contribution to documentation on land and water use in Latin America is also important. (FM)

5935 **WHO, Geneva.** *Conférence-atelier sur l'Approvisionnement en Eau et l'Assainissement en Milieu Rural Sahelien. (Workshop on Rural Water Supply and Sanitation in the Sahel).* Geneva, WHO, Apr 1978. 85p. Fren.
Conférence-atelier sur l'Approvisionnement en Eau et l'Assainissement en Milieu Rural Sahelien, Niamey, Niger, 17-22 Oct 1977.

This workshop was organized into eight sessions, during which two parallel groups discussed a variety of topics pertaining to water supply and sanitation in the Sahel. Topics covered included the education and participation of the population, training of technical personnel, maintenance of equipment, reliability and appropriateness of equipment, administrative cooperation in the field and at the national level, financial problems, and the integration of sanitation into rural development programmes. Instructions for the construction of various types of latrines are included. The report also contains recommendations and the summary of a field trip. (FM)

IV.7 Occupational and Physical Therapists

5936 **Masse, P.** *Treatment of poliomyelitis.* Children in the Tropics (Paris), III, 1978, 14-21. Engl.

The treatment of pediatric poliomyelitis consists basically of preventing deformities, ensuring that the damaged muscles recover, and enabling the child to function as normally as possible. Upon diagnosis, the initial treatment consists of pain relief and maintaining the muscle segments in the ideal functional position. Secondary treatment includes muscular assessment, orthopedic assessment, and rehabilitation. Guidelines for handling sequelae and evaluating treatment results are also given. Minimum training requirements for auxiliaries, since specialists such as physiotherapists are unlikely to be found outside of hospitals, are discussed. (DP-E)

IV.8 Health Educators

5937 **Owie, K.** *Educating the foreign prospective health educator.* Health Education (Washington, D.C.), 9(3), May-Jun 1978, 24-25. Engl.

The author, a Nigerian studying health education in the USA, discusses ways in which health education curricula could be adapted to the needs of foreign students from developing countries, where health problems are vastly different from those in the USA. Suggestions are made concerning appropriate topics in disease control, nutrition education, and consumer health. Health educators from developing countries must be especially flexible in their approach to population problems, traffic safety, and hygiene. (DP-E)

IV.9 Teaching Aids

IV.9.1 Health Care, Nutrition, and Disease Control

See also: 5608, 5787, 5868, 5870, 6242.

5938 **ACTION, Peace Corps, Washington, D.C.** *Community health education in developing countries; getting started.* Washington, D.C., American Public Health Association, Peace Corps, Information Collection and Exchange, Program and Training Journal Manual, No. 8, 1978. 209p. Engl.

This manual for Peace Corps volunteers presents advice and guidelines for helping a community set up a health project, including how to find out relevant information and help the people organize, and planning, implementing, and evaluating community health projects. Teaching aids and methods are described in a separate section. The 1st section contains instructions for recognizing and dealing with common community health problems, specifically malnutrition, maternal child health, communicable disease control, and emergency medical care. Appendices cover surveys, data collection methods, sample teaching aids, sources of material and information, vocabulary used, and health education and immunization campaigns. (RMB)

5939 **ACTION, Peace Corps, Washington, D.C.** *Health and sanitation lessons (Africa).* Washington, D.C., ACTION, Peace Corps, Information Collection and Exchange Reprint Series No. 27, n.d. 94p. Engl.

Originally published in French.

This collection of health, nutrition, and sanitation lessons was designed for use in the Gambia by health educators in home visits, prenatal and postnatal consultations, clinics, and primary schools. Each lesson is divided into six sections: goal, objectives, visual aids, presentation, questions, and summary, for the purpose of eliciting active participation by the target group or person. Topics covered include: antenatal care, childbirth, home and maternal child health clinic visits, monitoring child growth, cleaning the compound, personal hygiene, feeding and weaning, proper sanitation and consequences of poor sanitation, common illnesses, and immunizations. Appendicies include sample recipes, a nutrition lexicon, and notes on complementary proteins. (EB)

5940 **African Medical and Research Foundation, Nairobi.** *Management of burns.* AFYA (Nairobi), 12, Jul-Aug 1978, 102-103, 105-108, 110-112. Engl.

Adapted from Medicine Digest, May, 1977.

In Africa, the groups at greatest risk of being burnt are children, drunks, epileptics, and lepers. This article examines the issues of: tissue damage; skin function; classification and assessment of burns; burns disease and management of the 1st stage; calculation of fluid requirements; the management of the 2nd (toxic) stage, including exposure treatment, bathing, topical agents, systemic antibiotics, and full-thickness burns; the management of the 3rd stage, mainly supportive treatment to encourage rehabilitation and skin cover; and prognosis. Burn treatment in developing countries is complicated by the misconception that only plastic surgeons and centralized burn units can provide adequate care. (DP-E)

5941 **Alleyne, G.A., Hay, R.W., Picou, D.I., Stanfield, J.P., Whitehead, R.G.** *Protein-energy malnutrition.* London, Edward Arnold, 1977. 244p. Engl. Refs.

Directed at postgraduate doctors and scientists, this introductory textbook draws from Caribbean and African experiences to cover the major aspects of protein-energy malnutrition (PEM). The authors classify PEM and describe the clinical features of marasmus and kwashiorkor. The ecology of the disease is discussed, emphasizing the role of nutrition, social factors, family size, and poverty. Pathological, biochemical, and physiological aspects are also covered. The interaction between infection and PEM, the treatment of severe forms of the disease, the effect on growth, and methods of assessing nutritional status are among other topics covered. The final chapter evaluates prevention and rehabilitation measures. (FM)

5942 **Amstey, M.S.** *Immunization in pregnancy.* Clinical Obstetrics and Gynecology (New York), 19(1), 1976, 47-54. Engl. 12 refs.

This article is intended to provide guidelines and general principles for immunization during pregnancy. Although immunization is generally avoided during pregnancy due to possible risks to the fetus, the physician may consider it necessary when contracting the disease would pose an even greater risk to both mother and child. A list of vaccines, toxoids, and serums is provided. The author feels that an understanding of the effects of pregnancy on some immune mechanisms, the types of agents used for immunoprophylaxis, and the risk factors involved should make decisions easier regarding selection of vaccines and the need for using them. (Modified journal abstract)

5943 **Bulletin of the International Union against Tuberculosis, Paris.** *Technical guide for sputum examination for tuberculosis by direct microscopy. 3ed. rev.* Paris, International Union Against Tuberculosis, Dec 1978, Suppl. No. 2. 15p. Engl.

These guidelines are intended for field laboratories, which may often have limited facilities and personnel. Separate sections cover collection of sputum specimens, their storage and transport, the laboratory, reception and registration of specimens, preparation of smears, staining technique, examination by microscopy, results of the examination, recording at a microscopy centre, disposal of examined slides, dispatch of the results of the examination, and formula-

tion of reagents. Annexes contain sample registers and records. (RMB)

5944 **Carlier, A.** *Salud para toda la familia con una buena alimentación: comidas con y sin carne. (Health for the whole family through good nutrition: meals with and without meat).* Huancayo, Perú, Instituto de Estudios Andinos, Edición para la Sierra, 1977. 54p. Span.

With reference to locally available Peruvian foods, this simply written, liberally illustrated handbook instructs the reader regarding the three categories of foods and their value to the body, less expensive or locally available foods that may be substituted for others of the same category (e.g., fish or soybeans for meat), herbal remedies that may be used instead of expensive medicines to treat common ailments, a bread-making technique (recipe included) for more nutritious and less expensive a bread, the superiority of breast-feeding over bottle-feeding, and infant and child feeding. A chart listing examples of balanced meals is included. (HC-L)

5945 **Centre d'Information sur la Régulation des Naissances, la Maternité et la Vie Sexuelle, Paris.** *Connaissance de la sexualité; nos organes sexuels; description, fonctionnement, fécondation. (Sexual knowledge; our sexual organs; description, function, fertilization).* Paris, Centre d'Information sur la Régulation des Naissances, la Maternité et la Vie Sexuelle, Jun 1978. 19p. Fren.

This illustrated handbook outlines the physiology of the human reproductive system. Following brief descriptions of male and female reproductive organs and their functions, the role of the nervous system is examined and the effects of psychological or environmental disturbances are discussed. The final section covers fertility and conception, illustrating most fertile and infertile periods. (FM)

5946 **Davies, F.G., Bassett, W.H.** *Clay's handbook of environmental health. 14 edition.* London, H.K. Lewis, 1977. 1020p. Engl.

This handbook deals mainly with legislation and environmental health standards in the UK, but some of the information may be useful to planners in developing countries. The section on administration covers legislation, training of public health officials, health education, etc. Construction technology (part 2) examines lighting, ventilation, heating, drainage, work schedules, etc. In part 3, housing, including canal boats, is the main topic, while health and safety, the subjects of part 4, comprise such areas as occupational health, disease control, pest control, and radiation. Pollution control (part 5) includes noise, atmospheric pollution, water, sewerage, and garbage disposal. Food safety and hygiene are covered in the last part. (RMB)

5947 **Davis Kelly, E.** *Physical therapy in leprosy for paramedicals; level 1.* Bloomfield, N.J, American Leprosy Missions, 1980. 34p. Engl.

This illustrated manual of physical therapy in leprosy treatment is intended to help paramedics teach patients how to prevent hand, foot, and eye damage. Separate sections cover problems and responsibilities in leprosy therapy, types of leprosy, nerve trunk palpation, nerve fibre function, benefits of early treatment, skin sensitivity testing, hand and foot movements, the eye in leprosy, neuritis, primary and secondary damage, wounds, exercises, and complications. Each section discusses diagnosis, assessment, and treatment. (AF)

5948 **Friedman, I.B. ed(s).** *Valley Trust: a sociomedical project for the promotion of health.* Botha's Hill, South Africa, The Valley Trust. Engl.

This unofficial manual for health workers serving with the Valley Trust, a sociomedical project for promoting health among the South African Zulus, is aimed mainly at arresting the rapidly deteriorating dietary practices of the tribe and supporting conservation and agricultural and rural development activities. Topics covered include patient motivation, nutrition education, sample recipes, breast-feeding, management of diarrhea, composition, the construction of deep trench and mock trench systems for growing vegetables, poultry management, a schedule for growing vegetables, dam-making, construction and management of fish ponds, water supply, construction of a water ram pump, and guidelines for waste disposal and house construction. (DP-E)

5949 **Galbraith, J.E.** *Basic eye surgery; a manual for surgeons in developing countries.* Edinburgh, Churchill Livingstone, Medicine in the Tropics Series, 1979. 92p. Engl.

This concise and simply written manual was compiled to help general surgeons in developing countries to perform emergency eye surgery when no specialist is available. Separate chapters describe: general nursing procedures; surgical principles (lighting, magnification, surgical technique, etc.); instruments and their care; anaesthesia; surgery of the eyelids, cornea, sclera, conjunctiva, lens, and eye injuries; and the general principles of medical ophthalmology. (AF)

5950 **Haupt, A., Kane, T.T.** *Population Reference Bureau's population handbook; a quick guide to population dynamics for journalists, policymakers, teachers, students, and other people interested in people.* Washington, D.C., Population Reference Bureau, 1978. 59p. Engl. Refs.

The purpose of this population handbook is to clarify and explain demographic terminology to aid public understanding and assist those who are not formally trained in demography yet are concerned with population facts. Separate sections deal with the tools of demography, age and sex composition, fertility, mor-

tality, morbidity, nuptiality, migration, urbanization and distribution, and population change. There are a glossary and a list of population information sources. Statistical data and many examples are included. (DP-E)

5951 **Huckstep, R.L.** *Poliomyelitis; a guide for developing countries, including appliances and rehabilitation for the disabled.* New York, Churchill Livingstone, Medicine in the Tropics, 1975. 279p. Engl. 13 refs.

This illustrated book intended for all levels of health workers and other interested persons describes some practical but very effective methods of managing untreated poliomyelitis victims and other paralyzed patients in developing countries. The methods include: simple operations; splints, aids, and appliances of various kinds; and rehabilitation that is geared to conditions of limited resources. Considerable information on poliomyelitis and its diagnosis and prevention is also given. (HC-L)

5952 **Jamaica, Ministry of Health.** *Primary health care: the Jamaican perspective; a reference manual for primary health care concepts and approaches in Jamaica.* Kingston, Jamaica, Ministry of Health, 1978. 46p. Engl.

The Jamaican definition of primary health care states that it must: include all services that can be provided at the most peripheral level and serve as an entry point into the health care system; integrate curative, preventive, rehabilitation, promotional, and community development activities; mobilize all available community resources; and increase accessibility to other levels of the system. Primary care activities range from maternal child health and family planning through disease control to pharmaceutical services. This primary care reference manual covers the role of health services and government organizations, health policies and planning, the present health status, concepts of primary health care, primary care delivery, community involvement, training needs, and constraints in implementation. (DP-E)

5953 **Jopling, W.H.** *Handbook of leprosy. 2 edition.* London, William Heinemann Medical Books, 1978. 139p. Engl. Refs.

For 1st edition, see entry 1910 (volume 3).

This edition of the handbook brings the previous one up to date, with an additional chapter on immunological aspects of the disease, an enlarged glossary, and a number of new figures and tables. It covers: the epidemiology of leprosy; bacteriological, pathological and clinical aspects of the disease; the lepromin test; diagnostic tests such as skin smears, nasal scrapings, etc.; immunological concepts; leprosy reactions; management, including record-keeping, drugs, other aspects of treatment, surgery, etc.; and prevention. There are a glossary, double conversion tables, and an index. (RMB)

5954 **Lanoix, J.N., Roy, M.L.** *Manuel du technicien sanitaire. (Sanitary inspector's manual).* Geneva, OMS, 1976. 193p. Fren.

This practical guide to environmental sanitation was specifically developed to meet the needs of technical and auxiliary sanitary manpower in French-speaking African, Asian, and Middle Eastern countries. Some chapters, such as those on disease prevention and pesticides, are provided with a glossary of terms while others, such as those on water supply, waste disposal, and insect vectors, are lavishly illustrated. Other topics covered include food and housing hygiene, school and occupational health, atmospheric pollution, environmental diagnosis, disaster measures, public education, and public health organization. (HC-L)

5955 **Lembaga Kesehatan Nasional, Indonesia.** *Child in the health centre; book one: a manual for health workers; a component of a child care package. English experimental edition.* Indonesia, Lembaga Kesehatan Nasional, 1974. 556p. Engl.

This well-illustrated manual for Indonesian health workers covers all aspects of child care in health centres, including disease in the child and in the community, supplies and equipment, and care of the healthy as well as the sick child both in the clinic and in home surroundings. Illnesses such as malnutrtion, respiratory problems, diarrhea, fever, skin diseases, abdominal problems, etc., are discussed. The last section of the manual concerns the newborn infant, postpartum care, breast-feeding, and special problems. (AF)

5956 **Losos, J.** *Management of imported and endemic common parasitic diseases by the primary health care system in Canada.* Ottawa, IDRC, Document No. 136, May 1977. 39p. Engl. 17 refs.

Unpublished document.

Travel and immigration have greatly increased the incidence of parasitic diseases in Canada. Most of these can be determined by a simple stool test and dealt with at the primary level. This publication, intended for the general practitioner, contains a review of the various parasitic diseases, including those that should be referred to a higher level of the health system, and an annotated list of the drugs that are available for their treatment. (HC-L)

5957 **Manschot, P.** *Transport.* AFYA (Nairobi), 13, Apr-Mar 1979, 52, 54-57, 59. Engl.

Instructions for maintaining a Landrover, the major and generally the only form of transportation available to most East African health centres, are given. These include normal running expenses for tires, the battery, repairs, and gasoline consumption. Landrovers are essential for taking acutely ill patients to hospital, collecting drugs and other needs from a central depository, visiting satellite clinics, arranging mobile

health clinics, and visiting local villages during emergencies. (DP-E)

5958 Michon, L. *Examining children under two years old.* AFYA (Nairobi), 12, Nov-Dec 1978, 161-168, 170-171. Engl.

The proper procedure for examining children aged less than 2 years is described. The most serious emergencies should be dealt with first; these include convulsions or coma, dysponea, acute dehydration, and anaemia. As a prelude to a more leisurely (15-20 minutes) examination, the health worker should ascertain the child's age (by assessing motor development or counting teeth, if necessary), compare his nutritional status with normal standards, and get his history from the mother. During the examination itself, the child's general appearance should be evaluated and all his systems (circulatory, respiratory, etc.) investigated. Urine and stool specimens are also valuable diagnostic aids. (DP-E)

5959 Murayama, J. *Cholera.* AFYA (Nairobi), 12, Sep-Oct 1978, 130-134, Nov-Dec 1978, 173-175. Engl.

The 1st part of this article deals with the need for health education concerning cholera, its pathogenesis and management (particularly rehydration), and the role of health workers in its control. The 2nd part discusses the management of the disease in children. Nine guidelines are given for fluid replacement in children, including the calculation, constitution, and administration of intravenous solutions, the procedure for fluid replacement, drugs, and diet. Instructions are also given for rehydrating adults and children weighing more than 10 kg. (DP-E)

5960 Organización Panamericana de la Salud, Washington, D.C. *Control de tuberculosis en América Latina; manual de normas y procedimientos para programas integrados. (Tuberculosis control in Latin America; manual of norms and procedures for integrated programmes).* Washington, D.C., Organización Panamericana de la Salud, Publicación Científica No. 376, 1979. 227p. Span. Refs.

Based on experience in Latin America, this manual presents a model for tuberculosis control on a national scale. The emphasis is on simple, standardized, low-cost procedures and techniques that can be applied by auxiliary personnel within the basic health services; the manual also constitutes a guide to the development of training materials for such personnel. Topics covered include: BCG vaccination; case detection; programme structure; functions of central, intermediate, and local level personnel; epidemiological, operational, and technical aspects of programming; programme goals, objectives, and feasibility; surveillance and information systems; supervision; evaluation; and training. (HC-L)

5961 Robinson, M.J., Lee, E.L. ed(s). *Paediatric problems in tropical countries.* Edinburgh, Churchill Livingstone, 1978. 349p. Engl.

This handbook of pediatric problems is intended for medical students and physicians practicing in tropical and developing countries. It defines major child health problems and indicates possible solutions. Detailed descriptions have been reserved for the most common disorders and for those that are solely tropical or of fundamental importance to child health in tropical countries. The most recent theoretical and practical advances in pediatrics are included and recent references provided at the end of most chapters. There are photographs, statistical data, and an index. (RMB)

5962 Rother, F., Chinchilla Aguilar, O. Oficina Regional de Catholic Relief Services, Guatemala City. *Fracturas. (Fractures).* Guatemala City, Oficina Regional de Catholic Relief Services—USCC para la Salud y la Nutricion, Serie Primeros Auxilios, Manual No. 5, 1977. 25p. Span.

The purpose of this handbook is to teach first aid in case of fracture to persons living in areas far from a medical facility. In simple language accompanied by line drawings, it explains the gravity of fracture, the signs of a fracture, the difference between open and closed fractures, how to immobilize a fractured limb, etc. The handbook has been prepared with the idiom and local circumstances of Guatemala in mind. (HC-L)

5963 Seaton, R.S., Seaton, E.B. *Here's how: health education by extension.* South Pasadena, Cal., William Carey Library, 1976. 128p. Engl. Refs.

This handbook is designed to help Christian mission staff design cost-effective training programmes for community health workers and set up community health projects that enhance the people's spiritual, as well as physical, health. Separate sections of the book cover common health problems, a definition of health, health education by extension, the role of the basic health worker, community health services in action (with examples from Guatemala, India, and Korea), a model programme for health by extension, the messengers and the message, and the healing community. Appendices contain sample forms and training models. (DP-E)

5964 Sillonville, F. *Manuel pratique pour infirmiers et éducateurs africains: guide de l'éducation pour la santé. (Practical manual for African nurses and educators: guide to health education).* Dakar, Presses de la Grande Imprimerie Africaine, 1979. 120p. Fren.

This guide to health education in Africa is intended for all employees in the public sector (health workers, sanitary inspectors, agricultural extension workers, teachers, etc.) who have an interest in improving community health. Its various chapters treat these topics: getting acquainted with a community, choosing

educational themes, the educational process, techniques for health education, organizing a health education campaign, preventing focally-transmitted diseases, malaria prevention, preventing childhood malnutrition, maternal and child health, immunization, stories with health themes, obstacles to health education, and evaluating health education. Numerous illustrations and stories suitable for use as teaching aids are included. (HC-L)

5965 **Simpson, D.I.** *Infecciones por virus de Marburgo y Ebola: guía para su diagnóstico, tratamiento y control. (Margburg and Ebola virus infections: guidelines for their diagnosis, treatment, and control).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 85(1), Jul 1978, 54-72. Span. 12 refs.

The Marburg virus, discovered in 1967, and the Ebola virus, discovered in 1976, are viruses of obscure origin that cause a highly contagious fever accompanied by haemorrhage. So far, outbreaks of both have occurred in or been traced to Africa, but rapid international travel could allow them to take hold elsewhere. This guide, which details the epidemiology, diagnosis, and management of these and similar viral manifestations, is intended to equip Latin American health services against such a possibility. (HC-L)

5966 **Stead, W.W.** *Understanding tuberculosis today; a handbook for patients. 4 edition.* Milwaukee, Wis., Central Press, Apr 1975. 32p. Engl.

Also published in Finnish, Japanese, and Spanish; see also entry 2633 (volume 4) for 3rd edition.

This handbook is designed to inform tubercular patients about all aspects of the disease. Presented in a simplified form with illustrations, the book deals with the transmission of tuberculosis, the various stages of its development, laboratory diagnostic techniques, hospitalization, and treatment methods. Tuberculosis of organs other than the lung is also described. Special features of the infection in children are presented and suggestions given for the prevention of the disease. The book concludes with a quiz and several case histories. (FM)

5967 **WHO, Geneva.** *Guidelines for programmes for the prevention of blindness.* Geneva, WHO, 1979. 47p. Engl.

Also published in French.

These guidelines are intended as a basic reference work to be adapted and expanded to meet the needs of national and regional programmes. The 1st section outlines the goals, strategies, and policies for national campaigns for the prevention of blindness, followed by a discussion of criteria for assessing the extent of ocular problems in a community, the testing of visual acuity in individuals, and the classification of visual impairment. Methods of intervention and control of the major causes of developing country eye conditions—trachoma, malnutrition, onchocerciasis, and cataract—are discussed. A section on the organization of national programmes covers community participation, training and types of personnel, and budgetary planning. Finally, the efforts of international organizations are described. (DP-E)

5968 **WHO, Geneva.** *Breastfeeding.* Geneva, WHO, 1979. 40p. Engl.

This well-illustrated WHO brochure is designed to assist health workers and others in encouraging mothers to breast-feed their infants. It covers the natural course of breast-feeding, the conditions that help the mother to breast-feed successfully, the situations that need special attention, and the ways in which the health worker can help. A final notation stresses the advantages of breast-feeding over bottle-feeding. (AF)

5969 **WHO, Geneva.** *Selection of teaching/learning materials in health sciences education; report of a WHO study group.* Geneva, WHO, WHO Technical Report Series No. 538, 1974. 27p. Engl. Refs.

This report reviews the evaluation, dissemination, and utilization of teaching aids in health sciences education. After defining the categories of teaching/learning aids, the group considered the information needed by users in order to choose appropriate material. Chapter 3 examines the assessment of the effectiveness of teaching aids, including quality, effect on learning, cost-effectiveness, and acceptability. Chapter 4 reviews the problems involved in disseminating information on assessed materials, while chapter 5 studies their distribution and transfer from one country to another. The report recommends a pilot study on the establishment of an information service for teaching/learning aids. (FM)

IV.9.2 Family Planning and Midwifery

See also: 5608, 5945.

5970 **Baron, H.** *Santé de l'enfant; guide pratique. (Child health; a practical guide).* Bobo-Dioulasso, Haute-Volta, Centre d'Etudes Economiques et Sociales d'Afrique Occidentale, 1978. 141p. Fren.

This practical handbook was designed for use by public health nurses, midwives, and social workers in Africa and other developing regions. Brief chapters cover all aspects of child health, including prenatal care, hygiene for pregnant women and nursing babies, and breast-feeding. Other chapters cover physical examinations and describe a variety of childhood illnesses, including nutrition-related diseases, contagious diseases, and parasitic infections. A list of useful medicines and medicinal plants is presented, followed by definitions of medical terms. (FM)

5971 **Maglalang, D.M.** *Agricultural approach to family planning.* Manila, Communication Foundation for Asia, 1976. 159p. Engl.

This manual traces the evolution of the agricultural approach to family planning, i.e., the use of agricultural examples to explain family planning, as developed by the International Institute of Rural Reconstruction, Cavite, the Philippines. The emphasis is on the methodology used in the practical application of this concept—the planning, preparation, pretesting, production, and evolution of a series of comic books and flipcharts, examples of which are shown in the appendices. (HC-L)

V Formal Evaluative Studies

V.1 Health Workers

See also: 5634, 5829, 5917, 5927, 5989, 6035, 6038, 6041.

5972 **Bandaranayake, R.C.** *Utilization of feedback from student evaluation of teachers.* Medical Education (London), 12(4), 1978, 314-320. Engl. 9 refs.

Sri Lankan students who had completed part of their medical course rated their teachers by means of a multiple choice questionnaire. Each teacher received the results from his or her own and other teachers' evaluations. Six of these teachers were reevaluated the following year by another class of students. Positive change, often significant and not necessarily amenable to improvement by feedback, was noted in the majority of cases. There was no evidence of a "halo effect" arising from students of one ethnic group evaluating teachers of the same ethnic group. The reliability of the measurements was tested in several ways. Statistical data are included. (Modified journal abstract)

5973 **Bertrand, W.E., Micklin, M.** *Attitudinal classification of health manpower in Colombia: a research note on urban/rural differences in occupational prestige.* Social Science and Medicine (Oxford, UK), 13A(2), Mar 1979, 235-240. Engl. 28 refs.

An occupational prestige survey was conducted in rural and urban areas of Colombia in 1972 in order to analyze the prestige associated with various health occupations. Physicians enjoy the most prestige, followed by the other professional, then non-professional, categories. In isolated rural areas, traditional healers showed a significant upward trend in prestige, although generally they were at the bottom of all categories. Results indicate the public's ability to evaluate details of hierarchy. Only real changes in terms of training, responsibilities, or functions will result in changes in prestige attached to any given occupation. Statistical data are included. (FM)

5974 **Breslau, N.** *Role of the nurse-practitioner in a pediatric team: patient definitions.* Medical Care (Philadelphia, Pa.), 15(12), Dec 1977, 1014-1023. Engl. 24 refs.

Patient conceptions and evaluations of the nurse practitioner's role were explored by a questionnaire distributed to a random sample of 86 US families who attended a pediatric office team comprising a pediatrician and a nurse practitioner. The majority of patients surveyed did not consider the nurse's addition to the office to be an improvement in the doctor's services. Although many patients took advantage of the opportunity to discuss with her issues they considered unworthy of the doctor's time, they did not value time spent with the nurse as meriting dispensing with some physician time or the payment of an additional fee. The low value placed on her services hinders public recognition of the nurse practitioner as a member of the health team. Statistical data are included. (Modified journal abstract)

5975 **Chacón, E., Beltrán R., O., Lara P., E.** *Enseñanza de la nutrición a nivel profesional en el campo de las ciencias de la salud en Venezuela. (Nutrition teaching at the professional level in Venezuelan schools of health sciences).* Archivos Latinoamericanos de Nutrición (Caracas), 28(1), 1978, 9-28. Span. 9 refs.

Two questionnaires on nutrition in the curriculum were addressed to educators and final year students, respectively, in 18 Venezuelan schools of medicine, dentistry, bioanalysis, and nursing. The results of the questionnaires, which are presented and discussed in this paper, confirm the hypothesis that inadequate training is responsible for the poor participation of health professionals in the diagnosis, prevention, and treatment of nutrition problems. (HC-L)

5976 **Hookey, P.** *Establishment of social worker participation in rural primary health care.* Social Work in Health Care (New York), 3(1), Fall 1977, 87-99. Engl. Refs.

This paper examines four attempts to establish programmes involving social workers in rural primary health care services in the USA. Two of the programmes achieved viability and their success is attributed to the fact that the presence of the social worker was requested by the general practitioners involved, rather than superimposed from above. Some guidelines to the development of social work in rural primary care are drawn from these experiences. (HC-L)

5977 **Mathur, H.N., Damodar, Sharma, P.N., Jain, T.P.** *Impact of training traditional birth attendants on the utilisation of maternal health services.* Journal of Epidemiology and Community Health (London), 33(2), Jun 1979, 142-144. Engl.

The impact of training traditional birth attendants (TBAs) on the utilization of maternal health services at a rural health training centre in India is examined. Analysis of records of the utilization of the services for two 6-month periods (one before the training and the other after) showed a marked improvement in the number of antenatal cases registering early in pregnancy. The average number of visits to the antenatal clinic, immunization against tetanus, and the presence of trained personnel at the time of delivery also improved after local TBAs had been trained and motivated. Statistical data are included. (Modified journal abstract)

5978 **Ortin, E.L., Laurente, C.M., Limson, S.G.** *Demonstration of primary care nursing in a community setting—the Leveriza Project.* AHPHI Papers (Quezón City, Philippines), 13(3), Jul-Sep 1978, 2-15. Engl.

This Philippine study demonstrated the feasibility of establishing a nursing clinic managed by a community nurse practitioner and ascertained the educational requirements for this expanded role as well as physician and community reaction to it. In terms of service, the clinic offers a broader range of nursing activities and the opportunity for a new relationship with the physician, who now acts as a reference while the nurses make more independent decisions. Patients pay a token amount to instill in them the concept of responsibility towards prevention and maintenance. Some of the problems encountered by the project (lack of funding, manpower shortages, inadequate clinic facilities, etc.) are described. Statistical data are included. (DP-E)

5979 **Perry, H.B.** *Physician assistants: an overview of an emerging health profession.* Medical Care (Philadelphia, Pa.), 15(12), Dec 1977, 982-990. Engl. 20 refs.

This article describes the background characteristics, work environments, and job characteristics of physician's assistants from 1974-1975. Of the 939 physician's assistants surveyed, 75% were working in primary care specialities and 50% were located in communities with fewer than 50 000 inhabitants. Favourable levels of responsibility for patient care, supervisory support, and role acceptance were reported by respondents, although at the same time they felt that career opportunities were limited or nonexistent, a situation that may prove troublesome in years ahead. Statistical data are included. (Modified journal abstract)

5980 **Perry, H.B.** *Analysis of the professional performance of physician's assistants.* Journal of Medical Education (Chicago, Ill.), 52(8), Aug 1977, 639-647. Engl. 21 refs.

The job performance of 939 US physician's assistants was assessed by means of a self-rating scale as well as a 2nd scale completed by supervising physicians. Three quarters of the doctors were greatly satisfied with the work of their physician's assistants and indicated that they would hire them again. The influence of background and work environment characteristics upon performance was assessed by means of multiple regression. Graduating from a military training programme seemed to have a beneficial effect upon performance, while performance during training exerted only a weak effect on job performance and amount of education and prior medical experience did not affect it at all. (DP-E)

5981 **Rossghy, H.A.** *Kavar Village Health Worker Project.* Journal of Tropical Pediatrics and Environmental Child Health (London), 24(1), Monograph No. 52, Feb 1978, 13-60. Engl.

The Kavar Village Health Worker Project was established in 1972 to train village health workers (VHWs) to provide primary curative and preventive services in remote Iranian communities. The 1st part of this document describes the project's structure and function, including the preparatory, training, and field work phases and future plans. The 2nd part evaluated the project and discussed policy implications. Numerous appendices contain sample forms, financial information, and additional data on the selection, training, and functions of the VHWs. (DP-E)

5982 **Sampoerno, D., Talogo, R.W.** *Penilaian tentang sifat chusus dukun baji di Ketjamatan Senen dan Pendjaringan, Djakarta. (Survey of* dunkun baji *characteristics at Ketjamatan Senen and Pendjaringan, Jakarta).* Jakarta, Bidang Kuluarga Berentjana dinas Kesehatan D.C.1, Dec 1970, 1v.(various pagings). Indonesian.
Unpublished document.

This 1970 survey collected data on 203 *dunkun bajis* or traditional midwives in the area around Jakarta, Indonesia. The results revealed that: the *dunkuns* ranged in age from 30-70 years and had, at most, an elementary education; they received money and/or commodities for an average of three deliveries a month; they paid little attention to aseptic techniques; less than 12% performed abortions; most practiced traditional delivery techniques; and 38% advocated traditional methods of family planning, although few were aware of modern methods and only 23% expressed any interest in learning about them. Statistical data are included. (DP-E)

5983 **Short, J.C., Fairbanks, L.L., Kehoe, W.H., Apgar, D.A., Ewing, D.C. USA, Department of Health, Education, and Welfare.** *Pharmacist ar*

a provider of primary care—Indian Health Service. v.1. Washington, D.C., Department of Health, Education, and Welfare, Public Health Service, Health Services Administration, Indian Health Service, n.d. 181p. Engl.

Volume 1 of this report on the role of the pharmacist in the US Indian Health Service describes the objectives of the study, the methodology, data collected, and major conclusions. The main objectives were to establish a model in which the pharmacist provides acute medical care to patients with common illnesses and manages patient care between visits to the physician. The programme was evaluated on the basis of quality of care, patient and pharmacist satisfaction, acceptance by other health professionals, and cost-effectiveness. The excellent results obtained suggest that further studies, particularly in the private sector, should be carried out to explore all aspects of an expanded role for pharmacists. (FM)

5984 **Vanderschmidt, L., Massey, J.A., Arias, J., Duong, T., Haddad, J.** *Competency-based training of health professions teachers in seven developing countries.* American Journal of Public Health (New York), 69(6), Jun 1979, 585-590. Engl. 15 refs.

In order to test the competency-based approach to curriculum design in the field and ascertain its applicability to developing nations, ten national field directors from Cameroon, Colombia, Honduras, Lebanon, Malaysia, Nepal, and Vietnam taught teacher training workshops based on this model to a range of health professionals in their own countries. Evaluation of the workshops reveals that a number of health professionals used the method to design and teach a variety of courses for their own instructional purposes. However, for the method to be applied on a large scale, national educational policies must be changed. Statistical data are included. (DP-E)

5985 **Walia, B.N., Gambhir, S.K., Narang, A., Gupta, K.B.** *Evaluation of knowledge and competence of Anganwadi workers as agents for health care in a rural population.* Indian Pediatrics (Calcutta, India), 15(10), Oct 1978, 797-801. Engl. 10 refs.

A questionnaire was administered to 92 community health workers in India to test their knowledge of weight recording, temperature taking, infant feeding, immunization, and diagnosis of common diseases. Results show that their initial training programme is inadequate, especially in the recognition and treatment of common ailments. Additional supervision for these workers is also recommended. Statistical data are included. (DP-E)

5986 **Weinstein, R.** *Project report: follow-up of trained nurse midwives.* Journal of Nurse-Midwifery (Washington, D.C.), 23, Spring-Summer 1978, 36-39. Engl.

Since 1970, 27 Caribbean nurse-midwives have participated in a 3-month IPPF training programme. Responses to a questionnaire sent out in 1974 indicated that many participants were not using the skills they had acquired, mainly because the doctors with whom they work have been reluctant to delegate responsibility to them. A 2nd questionnaire sent out in 1977 showed some improvement, but many problems remain. The author discusses the findings of the 2nd survey in terms of the nurse-midwife's role, the application of skills acquired in the training programme, nurse-midwives as agents of change, their problem-solving abilities, and the multiplier effect of training. Conclusions about the benefits of the training and limitations on status and professional image are presented and recommendations made. (DP-E)

V.2 Organization and Administration

See also: 5856, 5877.

5987 **Adeokun, L.A.** *Fixed point approach to health care delivery in Nigeria.* Nigerian Medical Journal (Lagos), 8(5), Sep 1978, 480-483. Engl. 9 refs.

This paper discusses the problems related to the restriction of health services in Nigeria to fixed point activity (the type of system where level of service is determined by density of population), suggests modifications to this system, and highlights policy implications of these suggestions. The major problems include shortages of health units, equipment, and personnel that are further aggravated by maldistribution, lack of transportation, and inadequate financing. The author recommends a policy of decentralization, with emphasis on neighbourhood health units, and a division of labour that would more effectively utilize auxiliaries staffing mobile health units and indigenous health personnel such as travelling dispensers and circuit birth attendants. (DP-E)

5988 **Arbona, C., Ramirez de Arellano, A.B.** International Epidemiological Association, Geneva, WHO, Geneva. *Regionalization of health services; the Puerto Rican experience.* Oxford, UK, Oxford University Press, Oxford Medical Publications, 1978. Engl.

Regionalization involves the organization of an area's health services into a single, articulated, graded system that provides the highest possible level of care that local resources permit. This book describes how the process of regionalization was implemented in Puerto Rico (USA), examines the problems encountered andd assesses the results. Separate chapters cover the history of health services in Puerto Rico, the administrative and political aspects of regionalization, the Bayamón Project and lessons learned from the experience. Statistical data are included. (RMB)

5989 **Armenian, H.K.** *Developing a quality assurance program in the State of Bahrain.* Quality Review Bulletin (Chicago, Ill.), 4(8), Aug 1978, 9-11. Engl.

A 5-year project for the development of health manpower was initiated by Bahrain's ministry of health in 1976. Within this programme, a team of one physician and three research assistants carries out quality control activities to evaluate government health services. These activities have included the redesign of medical records and the formulation of policies concerning medical records maintenance, which led to an audit of physicians and services. Problems were identified and resolved. A quality control system is especially important for Bahrain, which has no medical school. (DP-E)

5990 **Azevedo, A.C. de** *Avaliação do impacto da operação de postos de saúde em pequenas comunidades rurais do norte do Estado de Goiás, Brasil. (Evaluation of the impact of the operation of health posts in small rural communities in northern Goiás State, Brazil).* São Paulo, Universidade de São Paulo, 1979. 2v. Portuguese. 293 refs.

Doctoral thesis presented to the Departamento de Prática de Saúde Pública da Faculdade de Saúde Pública da Universidade de São Paulo.

By means of a before and after survey, this doctoral thesis evaluates the impact of rural health posts staffed by auxiliary health workers on three small isolated villages in the Brazilian Amazon Region (State of Goiás). The evaluation methodology is of particular interest, because it makes use of parameters appropriate to the study of a tiny community within a short time span and because it can be administered at low cost by auxiliary personnel. Maps, photographs, and copious statistical data are included. (HC-L)

5991 **Bashshur, R.** *Public acceptance of telemedicine in a rural community.* Biosciences Communications (Basel, Switzerland), 4(1), 1978, 17-38. Engl. 9 refs.

The use of telecommunications technology and telemedicine to redress problems in the distribution and utilization of medical manpower and facilities is analyzed from the perspective of the general public and the users in a rural community in Maine (USA). The data suggest that, while open to new ideas, the public is reluctant to abandon traditional face-to-face contact with physicians completely. The user data reveal that users feel more comfortable once they become familiar with the technology and that planners should always seriously consider the manpower and organizational configurations as crucial to the success of these systems. (Modified journal abstract)

5992 **Bashshur, R., Armstrong, P., Saphire-Bernstein, I., Lovett, J., Whittaker, B.** *Rural health and telemedicine; a study of a rural health care system and interactive television.* Ann Arbor, Mich., University of Michigan, School of Public Health, Department of Medical Care Organization, 1976. 297p. Engl.

This project investigated the efficiency, acceptability, and impact of an innovative programme for the delivery of health services in a rural setting in Maine (USA) with emphasis on the potential contribution of telemedicine to the solution of critical health care problems. This report includes a brief discussion of the problems of rural health care, a description of the area in which the research was conducted, a description of the programme, and a review of telemedicine as a mode of delivery. Topics covered were acceptability of telemedicine and other innovations, utilization and accessibility of service, providers of service, and a community leader study. (DP-E)

5993 **Basu, R.N., Jezek, Z., Ward, N.A.** WHO, New Delhi. *Eradication of smallpox from India.* New Delhi, WHO, WHO Regional Publication South-East Asia Series, No. 5, WHO Series of History of International Public Health, No. 2, 1979. 346p. Engl. Refs.

The authors document the smallpox eradication programme in India from 1962-1977. Following background information, chapter 3 traces the history of the programme and chapter 4 studies smallpox epidemiology. Chapter 5 describes the vaccination techniques used, while chapter 6 reviews reporting and record-keeping methods. Surveillance techniques are described in chapters 7 and 8. Chapter 9 examines containment activities during smallpox outbreaks. Chapter 10 covers laboratory diagnosis policy and techniques. Surveillance of all cases of fever-with-rash is discussed in chapter 11. Chapter 12 outlines the administrative aspects of the programme, including budgeting and personnel. The final chapter describes several cases of concealment and incorrect diagnosis during the programme. Copious statistical data are included. (FM)

5994 **Carvalho de Noronha, J., Araujo Oliveira, J. de, Donato Rodrigues, R., Landmann, J.** *Transformações de um ambulatório de medicina integral com vistas a um programa de atenção médica primária; a experiência do Hospital de Clínicas da Universidade do Estado do Rio de Janeiro. (Reorganization of an outpatient dispensary aiming at a primary health care programme; experience of the Rio de Janeiro University Teaching Hospital).* Revista de Saúde Pública (São Paulo, Brazil), 11(4), 1977, 429-443. Portuguese. 11 refs.

In 1973, a number of outpatient services at the *Hospital de Clínicas da Universidade do Estado do Rio de Janeiro* , Brazil, were brought together in an integrated medical dispensary that offered primary medical care with referral to the specialties and subspecialties as required. This paper discusses the justification of this decision in terms of improved patient care and teaching potential and the opera-

tional changes that it involved, presents the results of an enquiry into its utilization pattern, and makes some suggestions for its further improvement. (HC-L)

5995 **Cooper, E.S.** *Paediatrics on paper.* Tropical Doctor (London), 9(3), Jul 1979, 124-127. Engl.
A pediatrician who worked for 4 years in St. Lucia emphasizes the need to eliminate unnecessary paperwork, mainly complicated printed medical records, in developing countries. Three types of simplified medical records that were found useful are described. The 1st, called the Child Health Passport, is modeled after the Morley "Road-to-Health" cards. The 2nd, the hospital doctors' record, provides guidelines for physicians inexperienced in pediatrics. The nurse's observation sheet, designed by the nurses themselves, was considered the most successful. (DP-E)

5996 **Daniel, S.O.** *Waste disposal—what are the problems in developing countries?* Royal Society of Health Journal (London), 99(2), Apr 1979, 75-78, 81. Engl. 8 refs.
A 1974 survey of 1 099 households in Lagos, Nigeria, collected information on the type of premises, type of household refuse receptacles, frequency of collection of refuse from the households, collection agents, and other disposal methods used. The results are discussed and presented as statistical data. Recommendations for improving water disposal services include supplying standard refuse receptacles with covers, purchasing more refuse collection vehicles, establishing better timetables and traffic patterns, health education, legislation, etc. (DP-E)

5997 **Ellis, C.G.** *Delayed flow of patients in a black hospital.* South African Medical Journal (Capetown), 53(16), 22 Apr 1978, 635-636. Engl.
A study was made of 200 patients discharged from a ward in a South African hospital for blacks to determine the causes of delay of flow through the system. These fall into three categories: lack of medical staff, delayed discharge, and miscellaneous causes such as clinical error, patient error, and administrative, communication, or investigational delay. The unique problems in hospitals for blacks can be alleviated by departmental admission protocols, outpatient liaison education officers, more even to distribution of medical manpower, improved hospital transport systems, and overnight stay wards incorporated in a more active outpatient system to replace the present sorting system. (Modified journal abstract)

5998 **Fernándes da Motta, E.G.** *Organización y mètodos para la màxima utilización de los recursos en la lucha contra la malaria. (Organization and methods for the maximum utilization of resources in the fight against malaria).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 85(6), Nov 1978, 430-441. Span.
Grupo de Estudio sobre el Control de la Malaria en las Américas, Washington, D.C., 12-15 Apr 1977.
The control of malaria requires a sustained, concerted effort that may prove discouraging to governments and populations in the long run. This paper reviews the organization and progress of malaria control in Brazil from 1939 up to the present, showing how it was revitalized (about 1970) when combined with other disease control and outreach programmes under a single administrative structure, the *Superintendencia de Campañas de Salud Pública* (SUCAM). (HC-L)

5999 **Gesler, W.M.** *Illness and health practitioner use in Calabar, Nigeria.* Social Science and Medicine (Oxford, UK), 13D(1), Mar 1979, 23-30. Engl. 12 refs.
This paper examines the health care system in Calabar, Nigeria. Topics covered in the discussion include children aged less than 6 years attending the family health clinic, illness experienced by these children over a 2-week period, traditional and modern health practitioners in Calabar, and efforts made to reach practitioners in terms of distance traveled, time spent, costs, and treatment outcome. Other questions deal with subgroups of children according to demographic, socioeconomic, and environmental factors and study differences in illness, type of practitioner contacted, efforts made to reach practitioner, etc. Relationships between type of practitioner and treatment outcome are also studied. Statistical data are included. (Modified journal abstract)

6000 **Gish, O.** *Health and family planning services in Bangladesh: a study in inequality.* International Journal of Health Services (Westport, Conn.), 11(2), 1981, 263-281. Engl.
The development of health and family planning services in Bangladesh is examined in the context of the country's political economy. Inequities of power, influence, opportunity, and ownership and distribution of assets and income are seen to lie at the root of the "Bangladesh crisis." The causes of too rapid population growth are discussed and the allocation of the health services resources, which are inequitably distributed and inefficiently applied, is examined. Some alternatives to present patterns of development are touched upon. It is concluded that, despite the country's poverty, most people could have access to basic primary health care. (Modified journal abstract)

6001 **Guyer, B.** *Vaccinations prè-scolaires en Afrique Centrale. (Preschool vaccinations in Central Africa).* Médecine d'Afrique Noire (Paris), 16(5), May 1979, 365-367. Fren. 9 refs.
This study of vaccination programmes in Cameroon revealed several shortcomings. In most cases, children are vaccinated just before beginning school, at the age of 5 or 6 years, despite the fact that many childhood diseases occur at a much younger age. Consequently, vaccination of schoolchildren is a waste of resources

that could be better used on younger children. Moreover, seasonal vaccination programmes place an unnecessary burden on health personnel. The necessity of producing a vaccination certificate in order to enter school has also led to the falsification of records, which results in an incorrect assessment of the level of protection. The author makes several recommendations for improving vaccination strategy. (FM)

6002 **Hargreaves, W.A., DeLay, E.A.** *Program evaluation in a rural community mental health center.* Community Mental Health Journal (New York), 15(2), 1979, 104-118. Engl. Refs.

This case example shows that a rural community health centre in Colorado (USA) can comply with federal government guidelines for programme evaluation through evaluation activities tailored to its special needs and small size. This article describes the centre, presents the federal guidelines for programme evaluation, and discusses how evaluation activities were carried out to assess the following: awareness, acceptability, and accessibility of services; client satisfaction; client outcome; consultation and education; and prevention of inappropriate hospitalization. (DP-E)

6003 **Kaiser Foundation International, Oakland, Cal.** *Management of rural health services, Ghana; annual report.* Oakland, Cal., Kaiser Foundation International, 1977. 1v.(various pagings). Engl.

This report discusses the activities during 1977 of the National Health Planning Unit in Ghana. Following an introductory chapter and summary, section 3 reveals achievements in the areas of health assessment, programme evaluation, human resources, finance, and delivery of health services. Section 4 summarizes special events such as a health planning workshop, a study of rural health services, and postgraduate training in public health. Sections 5 and 6 evaluate management training programmes and support for training abroad. Section 7 discusses the constraints to achievement, particularly shortage of personnel. Section 8 outlines project costs and the final sections examines future activities, including the design of a rural primary health system. (FM)

6004 **Maru, R., Murthy, N., Rao, T.V., Satia, J.K.** *Introducing professional management in public systems: some observations from IIMA's research on management of population programme.* Ahmedabad, India, Indian Institute of Management, Public Systems Group, Health and Population Unit, Mar 1980. 10p. Engl.
Third Annual Conference of the Indian Institute of Management, Ahmedabad, India, 12-13 Feb 1979.
Unpublished document.

An experimental project was initiated by the Indian Institute of Management, Ahmedabad (IIMA) in Utter Pradesh to find better ways of achieving national goals in family planning with emphasis on improved management practices. The project analyzed the work technology, systems development, and management processes of the existing family planning programme. This effort resulted in 12 related research projects, the training of all the managerial personnel from the block to the state level, and the development and implementation of a management information system for primary health centres. This paper presents three illustrations documenting the problems of introducing professional management into a public system. (DP-E)

6005 **Maru, R.** *Organizing for rural health: the Indian experience.* Ahmedabad, India, Indian Institute of Management, 1979. 19p. Engl.
Meeting of the Indian Institute of Management Working Group on Population and Social Development, Manila, Philippines, 20 Jan-3 Feb 1979
Unpublished document.

Issues relating to the organizational design of Indian health programmes are examined, with emphasis on the management of rural health centres. After pointing out the weaknesses of India's single-purpose and multipurpose auxiliary schemes, the author discusses the concept of the community health worker (CHW) introduced in 1977. A number of organizational issues that have emerged from recent CHW studies include administrative control versus community participation, the need to clarify the CHW's role, and the need to match the design of the health service with community needs. Five alternate models for reorganizing the existing relationship between the CHW and the formal health care system are presented. (DP-E)

6006 **McCord, C.** *Integration of health, nutrition, and family planning; the Companiganj Project in Bangladesh.* Food Research Institute Studies (Stanford, Cal.), 16(2), 1977, 91-105. Engl.

By describing a pilot project in Companiganj, the author evaluates the integration of rural health services with family planning in Bangladesh. A total of 145 service personnel work out of 2 general clinics and 5 subcentres that offer maternal child health care only. The project's greatest success lies in the recruiting and training of local people, particularly women, to work in the clinics. Recruiting professionals for supervisory positions has also been successful. Family planning and nutrition programmes were the most cost-effective components of the project. A breakdown of total costs is given. Both the successes and failures of such pilot projects need to be taken into account when planning national policy. (FM)

6007 **Patel, A.J. ed(s).** *In search of diagnosis; analysis of present system of health care.* Vadodara, India, Chunibhai Vaidya, Dec 1977. 175p. Engl.

This book is an anthology of articles selected from back issues of the *Medico Friend Circle Bulletin*, a monthly journal devoted to the analysis of India's present health care system. Topics covered include the

evolution of India's health services, objectives of medical education, national health policy, the future of and alternatives to modern medicine, population problems, the drug industry, nutrition, patent medicines, and dairy research. Appendices contain notes and articles on the relevance of the present health care system and an approach to community health care. (DP-E)

6008 **Retherford, R.D., Cho, L.J.** *Age-parity-specific birth rates and birth probabilities from census or survey data on own children.* Honolulu, East-West Population Institute, Reprint No. 102, n.d. Engl. Refs.
Reprinted with permission from Population Studies (London), 32(3), 1978, 567-581.

After explaining the methodology of the "own children" census technique, the authors use the method to estimate age-specific birth rates and birth probabilities by parity. The method is evaluated by comparing results with data based on birth registration obtained from vital statistics. Results show that "own children" estimates are fairly accurate for the ages and parities at which most births occur but tend to underestimate fertility at the youngest ages and overestimate at the oldest. Total fertility rates are comparable to those obtained from vital statistics. Statistical data are included. (FM)

6009 **Rifkin, S.B., Ding, L.K.** *"Community" health.* Modern Medicine of Asia (Hong Kong), 13(8), Aug 1977, 7-9. Engl.

The authors maintain that community health prorgammes that are characterized as hospital-based and doctor-administered are more properly called community medicine and discuss the reasons why this type of prorgamme is generally unsuccessful. Real community health prorgammes that provide primary care and are organized from the grassroots up have four essential characteristics: they were established by consultation with the people in the communities to meet the needs they described; the prorgammes have been defined by the community leaders, not by health professionals; local manpower is used to carry out much of the work; and a major objective of these prorgammes is to mobilize local resources. (DP-E)

6010 **Roemer, M.I.** *Health care systems in world perspective.* Ann Arbor, Mich., Health Administrative Press, 1976. 289p. Engl.
Individual chapters have been abstracted separately under entries 5619, 5646, 5647, 5681, 5707, 5796, 6011, 6012, 6013, and 6250.

Part 1 of this book examines the historic development of worldwide health service systems and presents a global view of financing and delivery patterns. In part 2, developing country issues are studied; these include some health problems of El Salvador, Ceylon, Malaysia, Ethiopia, Latin America, the Philippines, Cuba, and the People's Republic of China. Industrialized countries are the subject of part 3. Part 4 deals with specific health programmes aimed at such topics as certain specified illnesses, rural areas, occupational health, allied health manpower, ambulatory services, social security, etc. The last section covers classification, organization, and regulation of medical systems and future prospects. (RMB)

6011 **Roemer, M.I.** WHO, Manila. *Development and current spectrum of organized health services in a new Asian country: Malaysia.* In Roemer, M.I., Health Care Systems in World Perspective, Ann Arbor, Mich., Health Administrative Press, 1976, 39-59. Engl. 40 refs.
For complete document see entry 6010; originally published in Rural Health Services Scheme of Malaysia, Manila, WHO, 1969, 5-36.

The current health service patterns in Malaysia have been influenced by the British colonial health system, the older Malay and Chinese practices, and present government policies. This article examines the current spectrum of public and private health services, including traditional healing and drugs, private medical practice and medical manpower, hospital services, the public health administrative structure, special health programmes in the ministry of health (particularly malaria and tuberculosis control), and other governmental and voluntary health programmes. (DP-E)

6012 **Roemer, M.I.** Organization of American States, Washington, D.C. *Health service patterns in Latin America: Peru, Costa Rica, Mexico, Brazil, and Chile.* In Roemer, M.I., Health Care Systems in World Perspective, Ann Arbor, Mich., Health Administration Press, 1976, 66-80. Engl. 10 refs.
For complete document see entry 6010; originally published in Medical Care in Latin America, Washington, D.C., Pan American Union, 1963, 246-272.

Latin American health service patterns show the influence of many forces: the early Indian culture, the Catholic church of imperial Spain and Portugal, the social security concept of modern Europe, and the public health ideas of North America. This study of health services in Peru, Costa Rica, Mexico, Brazil, and Chile examines traditional medicine, the charity system, military and other national programmes, social security, governmental medical care, industrial medical services, private medical care, resources in personnel and facilities, approaches to coordination, and the types of populations served. (DP-E)

6013 **Roemer, M.I.** *Politics and health services in two former Spanish colonies: the Philippines and Cuba.* In Roemer, M.I., Health Care Systems in World Perspective, Ann Arbor, Mich., Health Administration Press, 1976, 81-85. Engl.
For complete document see entry 6010; origi-

nally published as "Political Ideology and Health Care" in International Journal of Health Services (Westport, Conn.), Summer 1973, 487-492.

This article contrasts the socialist and capitalist ideologies concerning the organization of health services, particularly hospital services, in Cuba and the Philippines. Mostly in imitation of the USA's private enterprise system, the Philippines has a large number of doctors, whose competition for business keeps fees low. However, there are a low ratio and unequal distribution of hospital beds and the results of a compulsary social insurance programme are yet to be evaluated. Cuba's physicians receive free training and government salaries and there is a well-organized system of government hospitals that provide free medical care. (DP-E)

6014 **Srinivasa Murthy, R., Wig, N.N., Suleiman, M.A., Routledge, R., Ladrido-Ignacio, L.** *Community reactions to mental disorders; a key informant study in three developing countries.* Acta Psychiatrica Scandinavica (Copenhagen), 61(2), 1980, 111-126. Engl.

To facilitate planning an intervention and to have a basis for evaluating that intervention, teams of health workers interviewed key informants (usually community leaders) in rural areas of India and the Sudan and an urban area of the Philippines in order to determine community reactions to mental disorders. The results are discussed and presented as statistical data. Mental health, retardation, alcohol and drug problems, and acute psychosis were the most frequently identified conditions and attitudes toward these disorders varied widely. It was also found that individuals were more likely to consult traditional healers in cases involving mental disorder. The appendix contains vignettes used in the interviews to help stimulate response. This survey forms part of the WHO Collaborative Study on Strategies for Extending Mental Health Care. (DP-E)

6015 **Stingl, P.** *Sierra Leone; Analyse zur medizinischen Landeskunde—Teil 1. (Sierra Leone; a geomedical analysis—part 1).* Offentliche Gesundheitswesen (Stuttgart, Germany), 40(1), Jan 1978, 10-13. German.

The aim of the present paper is to offer an initial contribution to geomedical studies in Sierra Leone (West Africa). The 1st part of the article gives general information on the country, its population, and health services, including the organization of health services in rural and urban areas, training of health personnel, ratio of doctors in relation to the population figure, and regional distribution of doctors. This is followed by a critical review of the present structure of health services based on data from a UN study. This part of the study concluded with a description of government plans for improving health services. (Modified journal abstract)

6016 **Villagrán G., G.** *Algunos problemas en la atención pediátrica rural. (Various problems of rural pediatric care).* Revista Chilena de Pediatría (Santiago), 48(3-4), May-Aug 1977, 187-193. Span. 23 refs.

This paper describes the problems affecting the health of rural populations, especially children, in Chile and discusses the shortcomings of two attempts to alleviate them: the training of "zone" practitioners with specialist status for deployment in rural areas and the establishment of community health councils as a means of obtaining local input into health programmes. The zone practitioners suffer from inadequate preparation and insufficient support staff on the job, while the councils have functioned poorly due to the passivity of their members. Wider distribution of medical resources, delegation of functions, more appropriate medical training, and, above all, a serious attack on the extreme poverty of rural dwellers are required. (HC-L)

V.3 Planning

See also: 5618, 5665, 5668, 5687.

6017 **Caldwell, H.R., Dunlop, D.W.** *Empirical study of health planning in Latin America and Africa.* Social Science and Medicine (Oxford, UK), 13C(2), Jun 1979, 75-86. Engl. 23 refs.

This study analyzes the impact that underlying social and economic forces have on the objectives of health planning and the techniques employed in resource allocation decisions in the health sector. Data from 27 countries are used to analyze the interaction between social and economic forces, the health planning process, and ultimate resource allocation decisions in the health sector. This article studies the objective function of the health sector for countries in Africa and Latin America, reviews the various methodologies used by health planners with an example from Tanzania, and discusses the ways in which health planning may be a channel through which a more systematic process of decision-making can be incorporated into general economic development in developing countries. (Modified journal abstract)

6018 **King, M.** *Child and the chain, or 3 × 3 = nine; twenty-five unexpected similarities between two superficially dissimilar projects and the implications this has for the systematic development of the appropriate technology for personal health care in the developing world.* American Journal of Clinical Nutrition (Bethesda, Md.), 31(12), Dec 1978, 2269-2273. Engl.

The two projects in question are WHO's expanded programme of immunization, called the "cold chain" because it endeavours to keep vaccines cold from the factory to the child by simultaneously improving all technologies involved in the process; and the "child care microplan", a tool to enable the medical officer to upgrade care in his district by providing primary care

workers with an interlocking set of appropriate technologies for the diagnosis and treatment of a wide variety of diseases. Both are expressions of a "systems" approach: an approach that is held to be the key to helping developing countries take advantage of many appropriate technologies. (HC-L)

6019 **Majumdar, J.** *Clouds that hang on the horizon of national health.* Journal of the Indian Medical Association (Calcutta, India), 71(3), 1 Aug 1978, 62-63. Engl.

The author criticizes the health and financial planning policies of India's government. He notes that government officials blame their failure to improve rural health services on a lack of community participation in village health programmes. These officials also suggested that community health workers be trained only in the areas of health education and environmental health and defended their policies regarding physician distribution. According to the author, other important aspects of a national health plan that need to be implemented are a family planning programme and an integrated health care delivery scheme. (DP-E)

6020 **Schuftan, C.** *Challenge of feeding the people: Chile under Allende and Tanzania under Nyerere.* Social Science and Medicine (Oxford, UK), 13C(2), Jun 1979, 97-107. Engl. 43 refs.

The commitment to the premise "food as a right" was part of government policy in Chile from 1970-1973 and in Tanzania after independence. This commitment explains why these governments often overlooked Western criteria of decision-making when social advantages were seen in investing in human capital as a strategy for development. Economic development is different from economic growth and an increase in the GNP is not necessarily the ultimate goal. The attitudes of both governments are compared in terms of policy options and programme implementation. The analysis focuses on the relevant policies implemented and problems encountered in both countries in order to suggest the extent to which theoretical tentative conclusions, described in the literature as desirable, may have been achieved. (Modified journal abstract)

6021 **Solimano, G., Hakim, P.** *Nutrition and national development: the case of Chile.* International Journal of Health Services (Westport, Conn.), 9(3), 1979, 495-510. Engl. 37 refs.

This historical analysis of food consumption and nutrition in Chile emphasizes the influence of political and economic factors on nutritional standards. It attempts to document and explain the persistence of malnutrition as a widespread social problem in Chile even as the country achieved a relatively advanced state of economic development and boasted an unusually progressive record of social legislation. The major findings of the study were that Chile's pattern of development, social reform efforts not withstanding, consistently discriminated against low-income groups and that this discrimination perpetuated low standards of nutrition and low levels of food consumption among the country's poor and undermined the effectiveness of specific measures to alleviate malnutrition. (DP-E)

6022 **Ugalde, A.** *Role of the medical profession in public health policy making: the case of Colombia.* Social Science and Medicine (Oxford, UK), 13C(2), Jun 1979, 109-119. Engl. 19 refs.

This study of manpower composition in Colombia's Ministry of Health reveals that decision-making is controlled by the medical profession. The heavy orientation towards medical health care programmes, in detriment of other, more needed, public health actions, is linked to the decision-making primacy of the medical profession. This paper discusses additional negative effects in the organization of the public health sector produced by the near medical monopoly of decisions. Statistical data are included. (Modified journal abstract)

V.4 Geographical Distribution of Health Services and Workers

See also: 5896.

6023 **Adekolu-John, E.O.** *Role of dispensaries in community health care in the Kainji Lake area of Nigeria.* Journal of Epidemiology and Community Health (London), 33(2), Jun 1979, 145-149. Engl.

Dispensaries are the most common providers of health services and the only form of health facility in the Kainji Lake rural area of Nigeria. A survey of dispensary working conditions showed that 70% of dispensary assistants are frustrated by lack of support, supervision, and prospects for future training. A proposal is made for further training of the dispensary attendants and for improving their conditions of service. The seasonal distribution of the common diseases shows that infection follows the pattern of rainfall and that there are some differences between the pattern of these diseases and the common ailments reported by the villages located away from the dispensaries. A suggestion is made for the introduction of primary health care workers to meet the health needs of the villagers, 60% of whom do not even receive dispensary services. Statistical data are included. (Modified journal abstract)

6024 **Davey, S.C., Giles, G.G.** *Spatial factors in mental health care in Tanzania.* Social Science and Medicine (Oxford, UK), 13D(2), Jun 1979, 87-94. Engl. 28 refs.

First admission rates to the central mental hospital in Tasmania, Australia, were shown to decline significantly with increasing distance from the institution in a survey of the records of 1 000 patients admitted from 1971-1973. In addition, the age, sex, and marital characteristics of the patients differ markedly from those of the general population. In contrast to the interpretation that areas distant from the facility are

underserved, these analyses suggest that the nearby areas overutilize the services. This leads to the conclusion that traditional modes of health care are less efficacious in the amelioration of mental illness than a possible alternative approach stressing community-based preventive therapy. Statistical data are included. (DP-E)

6025 **Kane, R., Olsen, D., Wright, D., Kasteller, J., Swoboda, J.** *Changes in utilization patterns in a National Health Service Corps community.* Medical Care (Philadelphia, Pa.), 16(10), Oct 1978, 828-836. Engl. 9 refs.

Physician utilization patterns in two adjacent rural Utah (USA) counties were compared from 1971-1976. In one, a three-physician National Health Service Corps site was established and health services utilization increased in comparison with the other county, which had two physicians in private practice, although the patients tended to view the Corps physicians as transitory figures with whom they could form no attachment. However, a 2nd brief follow-up study a year later suggested that the community had begun to acknowledge the Corps doctors as their family physicians. Statistical data are included. (DP-E)

6026 **Mejia, A., Pizurki, H., Royston, E.** *Physician and nurse migration; analysis and policy implications.* Geneva, WHO, 1979. 476p. Engl. Refs.

Following an introductory chapter outlining the methodology, this report is divided into three parts. Part 1 describes the general characteristics of international health personnel migration, including trends in physician and nurse migration, and career patterns of migrants. A chapter on the causes of migration emphasizes the influence of unequal development of nations, poor manpower planning resulting in inappropriate health personnel, and urban/rural maldistribution. Other chapters examine the consequences of migration and national policies towards foreign health manpower. Part 2 consists of 13 country studies of the problem. Part 3 summarizes results and suggests changes in the health system and society in general. Statistical data are included. (FM)

6027 **Mejia, A.** *Migration of physicians and nurses: a world wide picture.* International Journal of Epidemiology (Oxford, UK), 7(3), Sep 1978, 207-215. Engl.

On the basis of existing published and unpublished information retrieved with the cooperation of WHO member states, WHO's multinational study of the international migration of physicians and nurses sought to identify a set of patterns of migration and to suggest alternative measures that could be considered to modify them. This paper summarizes the study findings *vis-à-vis* the dimensions, directions, determinants, and consequences of migration flows and the actions presently aimed at curbing them. It is suggested that the key to the latter lies in the formulation of more realistic health manpower policies and plans on the part of the donor countries. (HC-L)

6028 **Philips, B.U., Mahan, J.M., Kroshel, F.T.** *Migration of allied health care personnel in and out of an underserved area: a question of roots.* Journal of Allied Health (Thorofare, N.J.), 7, Fall 1978, 288-293. Engl. 10 refs.

Recruiting and training students in underserved areas has been suggested as one way to encourage graduates of allied health programmes to remain in rural areas. A 1-year follow-up study of 122 1974 graduates, mainly Mexican-Americans from southern Texas (USA), showed that, 1 year after graduation, 85% had returned to work in the area. Licensed vocational nurses experienced the least migration. Generally, professions requiring higher levels of education showed higher relocation rates; sex and ethnicity were also relevant factors. Higher salaries were not the only reason for migration. It appears that rural communities can help to reduce health manpower shortages by recruiting local students. Statistical data are included. (DP-E)

6029 **Sharma, J.K., Kataria, M., Gandhi, H.S.** *Assessment of medical manpower needs of the CGHS dispensaries.* Manpower Journal (New Delhi), 13(4), Jan-Mar 1978, 67-81. Engl.

An assessment of medical manpower for Indian dispensaries studied the gap between available physicians and the number needed to provide adequate medical care in the catchment area. The workload of four dispensaries was calculated over a 3-year period in terms of attendance per day, number of patients and cardholders, etc., and the time standard was determined by the Delphi approach. The gap between available and required medical manpower varied from 1-7 physicians and it was estimated that there should be a physician:patient ratio of 6:10 000. Statistical data are included. (DP-E)

6030 **Sivaganasundram, C., Samarawickrama, G.P.** *Study of 132 general practitioners in Sri Lanka.* Ceylon Medical Journal (Colombo), 22(4), Dec 1977, 161-167. Engl.

Information on personal characteristics and local disease patterns was collected from 132 general practitioners in Sri Lanka by means of a postal questionnaire. About 33% of the doctors practiced within 1 mile of a government hospital and 89% within 5 miles. Upper respiratory tract infections, bowel diseases, skin infections, anaemia, asthma, arthritis, and dental conditions comprise 75% of the diseases seen by these physicians and the authors recommend that they be given more emphasis in medical curricula. Statistical data are included. (DP-E)

6031 **Stock, R.** *Effect of distance on illness behaviour: evidence from rural Nigeria.* Winnipeg, Can., University of Manitoba, Department of Geography, 1979. 21p. Engl. 10 refs.

Annual Conference of the Canadian Association of African Studies, Winnipeg, Manitoba, 1-4 May 1979.

This conference paper examines how the distance potential Hausa users must travel to obtain treatment affects their utilization of medical facilities in rural Nigeria. Distance is considered in relation to stated preferences for traditional or modern treatment of the illness, the general pattern of hospital patient origins, and the utilization of treatment facilities for selected diseases such as conjunctivitis, diarrhea, scabies, venereal diseases, and certain surgical conditions. The influence of socioeconomic factors and disease incidence is also considered. Since distance can be demonstrated to discourage the utilization of health services, it must be taken into consideration by health planners. Statistical data are included. (DP-E)

6032 **WHO, Geneva.** *World health statistics annual, volume III, 1977; health personnel and hospital establishments/Annuaire de statistiques sanitaires mondiales, volume III, 1977; personnel de santé et établissements hospitaliers.* Geneva, WHO, 1977. 223p. Engl., Fren.

This volume contains statistics on health personnel and hospital establishments, showing in particular the number of persons working in the various health occupations as well as the ratio of physicians, dentists, pharmacists, medical assistants, and nursing personnel to the population of various countries. Information is given on the number of hospitals by category (general or specialized) and by types of administration (government or private) and on the bed complement, the number of admissions, and patient days. Certain indices on hospital utilization are also published. (Modified journal abstract)

V.5 Financial Aspects

See also: 5708.

6033 **Gilmore, A.** *Indian health care: what the dipute is all about.* Canadian Medical Association Journal (Ottawa), 121(2), 7 Jul 1979, 87, 90, 92, 94. Engl.

Over the past 5 years (1973-1978), the budget for Canada's federally funded Indian and Inuit health services programme increased from $14 million-$27 million. When government officials attempted to channel funds towards the maintenance of the 15 existing hospitals and 400 remote treatment centres by cutting back on other services such as transport and reimbursement for drugs, the Indians retaliated by charging tolls to motorists using reservation roads and earmarking the resulting funds for emergency health services. This article examines the historical and political basis for the Indians' claim to free health care, the reaction of both Indians and government officials to the present impasse, and future possibilities. (DP-E)

6034 **Hill, R.F., Greenwood, J.G., Wert, F.S.** *Evaluation of a remote, rural clinic manned by a physician's assistant.* Public Health Reports (Rockville, Md.), 94(1), Jan-Feb 1979, 60-66. Engl. 24 refs.

Evidence based on 2 years of evaluative research into the operation of a clinic in rural Oklahoma (USA) staffed by a physician's assistant indicates that such clinics are not a viable solution to the problem of rural health care delivery. It is suggested that these clinics may be overly dependent on public subsidy for economical survival, a development that is detrimental to a satisfying professional relationship between the new health practitioner and the employing physician. Statistical data are included. (DP-E)

6035 **Kielmann, A.A., Taylor, C.E., Parker, R.L.** *Narangwal nutrition study: a summary review.* American Journal of Clinical Nutrition (Bethesda, Md.), 31(11), Nov 1978, 2040-2052. Engl. 11 refs.

From April 1968-May 1973, the Department of International Health of John Hopkins University (Baltimore, Maryland, USA) carried out investigations into the interactions of malnutrition and infection and their effect on preschool child growth, morbidity, and mortality in 10 villages of Punjab, India. Study villages were allocated to a control group and three service groups in which nutrition and medical care were provided singly and in combination by resident auxiliary health workers who were able to manage more than 90% of village health needs. Results showed that prenatal nutrition care to pregnant women was most cost-effective in preventing perinatal deaths, followed by medical care for infants, then medical care for children aged 1-3 years. Statistical data are included. (Modified journal abstract)

6036 **Kielmann, A.A., Vohra, S.R.** *Control of tetanus neonatorum in rural communities—immunization effects of high-dose calcium phosphate-adsorbed tetanus toxoid.* Indian Journal of Medical Research (New Delhi), 66(6), Dec 1977, 906-916. Engl. 12 refs.

A study was carried out in nine villages in the catchment area of India's Narangwal Rural Health Research Centre to find ways of reducing mortality from neonatal tetanus. The 1st part of the study investigated the extent of immunization coverage of 1 820 women aged 15-44 years by a single injection of toxoid; the 2nd dealt with the effect of a high dose of calcium phosphate-adsorbed tetanus toxoid on antibody titre levels after one and two injections. The results are discussed and presented as statistical data. A cost-benefit analysis demonstrates that immunization is cheaper and more effective than hospital treatment of neonatal tetanus cases, of whom only about 27% can be saved. (DP-E)

6037 **Lechat, M.F., Vellut, C., Misson, C.B., Misson, J.Y.** *Application of an economic model to the study of leprosy control costs.* International Journal of Leprosy (Washington, D.C.), 46(1), 1978, 14-24. Engl.

The effectiveness of various control methods for reducing the incidence of leprosy has been tested over 20 years and compared with predictions made using the present method (early diagnosis and mass treatment). Specific vaccination of the whole population, a control measure yet to be developed, has been identified as the most effective strategy in the long run; in the short run, effective treatment is the most economical solution. Reducing the rate of abandonment of treatment and earlier detection both are useful under conditions of severe budgetary restraints, although they do not greatly reduce incidence. Segregation is costly and ineffective compared with other methods. Statistical data are included. (DP-E)

6038 **Moscovice, I., Rosenblatt, R.** *Viability of mid-level practitioners in isolated rural communities.* American Journal of Public Health (New York), 69(5), May 1979, 503-505. Engl.

This study evaluates the effectiveness in the northwest USA and Alaska of the National Health Service Corps (NHSC), which has been using physician's assistants and nurse practitioners to provide health care for isolated communities. Data collected from six sites showed that none had achieved financial self-sufficiency after more than 2 years of operation, although four sites in the northwest were 71% self-sufficient and could achieve complete financial independence after 1-2 years of continued growth. The authors suggest that a minimum population of 1 500 is necessary to support one middle-level health practitioner and that smaller, more remote areas will need continued NHSC support. (FM)

6039 **Sighart, H.** *Kostenvergleich antituberkulöser Chemotherapie. (Costs of anti-tuberculosis chemotherapy).* Praxis der Pneumologie (Stuttgart, Germany), 32(3), 1978, 181-183. German.

In hospital treatment of tuberculosis, the price of anti-tuberculous drugs represents only a small fraction of the total expenditure involved. However, some economies can be made in the costs of drug therapy without jeopardizing the success of the treatment. For example, the combination of isoniazid, streptomycin, and ethambutol is cheaper than the combination of isoniazid and ethambutol with rifampicin but is just as effective. In the domiciliary treatment of tuberculosis where the price of drugs is the only cost factor, expenditure could be considerably reduced by the choice of cheaper drugs. Isoprodian suggests itself as an effective and inexpensive alternative. (Modified journal abstract)

6040 **Tajeldin, H., Al-Ani, H.A.** *Die medizinische Betreuung im Irak vor und nach Einführung der Sozialversicherung. (Medical care in Iraq before and after the introduction of social insurance).* Zeitschrift für gesamte Hygiene und ihre Grenzgebiete (Berlin, Germany), 24(3), 1978, 205-207. German.

The authors compare medical care in Iraq before and after the introduction of social insurance in that country. The advantages and disadvantages of the new programme are mentioned and conclusions drawn concerning future work. (Journal abstract)

6041 **Tompkins, R.K., Wood, R.W., Wolcott, B.W., Walsh, B.T.** *Effectiveness and cost of acute respiratory illness medical care provided by physicians and algorithm-assisted physicians' assistants.* Medical Care (Philadelphia, Pa.), 15(12), Dec 1977, 991-1003. Engl. 25 refs.

The medical management of more than 5 000 patients with acute respiratory illness was analyzed at two US clinics. Patients received care from either physicians or physician-supervised physician's assistants who used clinical algorithms for diagnosis and treatment. Despite significant differences in patient population characteristics, illness outcomes were similar, while medical care costs were higher for physicians' patients. For all patients, diagnostic tests accounted for about 35% of the total direct costs and 60%-80% of medication costs were for non-prescription drugs to relieve symptoms. Statistical data are included. (Modified journal abstract)

V.6 Cultural Aspects

See also: 5871, 5954, 6108, 6172.

6042 **Abasiekong, E.M.** *Familism and hospital admission in rural Nigeria—a case study.* Social Science and Medicine (Oxford, UK), 15B(1), Jan 1981, 45-51. Engl. 11 refs.

In the light of social changes that are said to affect the institution of the family all over the world, this study was undertaken to see if changes had occurred in families in rural Nigeria, where the family has traditionally played a very important role in the individual's decisions. The study examined the extent to which people depended on the family decision concerning hospitalization, whether family consent was required in all cases for hospitalization, and the extent to which this practice was approved by the people. The findings show that family influence is still very strong, indicating that health professional/client relations should not focus solely on the individual. Statistical data are included. (Modified journal abstract)

6043 **Ademuwagun, Z.A., Ayoade, J.A., Harrison, I.R., Warren, D.M. ed(s).** *African therapeutic systems.* Waltham, Mass., Brandeis University, African Studies Association, 1979. 273p. Engl., Fren. Refs.

This textbook deals with indigenous African medicine and its relationship to health systems introduced into Africa from the West. It is intended to explode many of the existing myths about traditional African medical systems, bring these systems to the attention of health planners, and analyze the reasons for some of the conflicts between traditional and Western systems. The 1st part contains papers on African concepts of disease, the 2nd covers African treatment of disease, and the 3rd examines the interaction between African and Western medicine. There is an index. (DP-E)

6044 **Aghajanian, A.** *Fertility and family economy in the Iranian rural communities.* Journal of Comparative Family Studies (Calgary, Alta.), 9(1), Spring 1978, 119-127. Engl. Refs.

The findings of this study indicate the existence of a high level of fertility, as well as considerable variations among couples, in 25 Iranian villages. While fertility is high, differential fertility by education, occupation, and size of the land holding is apparent. The evidence seems consistent with the proposition that, in the agrarian community, where family economy is the major type of economic unit, the positive relation between family size and farm size may be interpreted as showing the demand for children for their productive services. Statistical data are included. (DP-E)

6045 **Barcia Manzanedo, H.** *Estudio sociocultural sobre integración de los sistemas de salud y participación de la comunidad. (Sociocultural study of the integration of health systems and community participation).* Educación Médica y Salud (Washington, D.C.), 11(4), 1977, 346-361. Span.

Nine hundred and twenty-two low-income urban (40%) and rural (60%) inhabitants of the State of Pernambuco, Brazil, were questioned regarding their utilization of and attitude toward medical institutions, both traditional and modern. Their responses indicated high utilization of traditional services, probably due to their low cost, but recognition of the desirability of modern ones and a general willingness to participate in community health programmes. This paper analyzes the results of the survey and its implications for the extension of modern health services. (HC-L)

6046 **Bickerton, J.** *Volunteer in Guatemala.* Nursing Times (London), 74(36), 7 Sep 1978, 1500-1502. Engl.

A British nurse describes her experience as a volunteer in Guatemala after the 1976 earthquake and examines the cultural difficulties that developed country health workers must face in this and other developing countries. During her stay, she had to forget much of her previous training, acquire new medical skills normally reserved for doctors and dentists, and adjust to the Guatemalan standard of health and medical care, which is largely dependent upon the country's extreme poverty. Guatemala's standard of living, the health care system, the earthquake, cultural beliefs, inappropriate help received from foreign countries, a community health project, and the role of the rural health promoter are discussed. (DP-E)

6047 **Caldwell, J.C., Caldwell, P.** *Role of marital sexual abstinence in determining fertility; a study of the Yoruba in Nigeria.* Population Studies (London), 31(2), 1977, 193-217. Engl. Refs.

Five surveys (1973-1975) among the Yoruba of Nigeria have revealed three types of marital abstinence that effectively reduce fertility: postnatal abstinence (often wrongly described as a taboo), terminal abstinence, and abstinence at other times. Abstinence, which is practiced mainly by married women rather than men or unmarried women, helps preserve long birth intervals and periods of lactation in a society prone to high rates of infant malnutrition and mortality. Consequently, married women spend less than half their reproductive lives in periods when sexual relations are possible and abstinence is 3-4 times more important than delayed marriage in restricting fertility. The partial substitution of contraception for the abstinence period is analyzed and the possible effect on fertility considered. Statistical data are included. (DP-E)

6048 **Camazine, S.M.** *Traditional and Western health care among the Zuni Indians of New Mexico.* Social Science and Medicine (Oxford, UK), 14B(1), Jan 1980, 73-80. Engl. 29 refs.

This study examines the role of traditional and Western health care among the Zuni Indians of New Mexico (USA). Over the past 100 years, changes in the practice of traditional medicine have resulted from alterations in the Zuni lifestyle and the introduction of health care provided by the Public Health Service. These alternative systems of health care are both utilized to a varying extent, determined by many factors. The present-day beliefs and expections of the Zuni concerning disease, its aetiology, and its treatment are described in an analysis of the interaction between the traditional and Western health care systems. Suggestions are made that may facilitate the acceptance of modern health care in communities where traditional medicine plays an important role. (Modified journal abstract)

6049 **Cheng, M.C., Cheong, J., Khew, K.S., Ratnam, S.S.** *Psychological sequelae of sterilization in women in Singapore.* International Journal of Gynaecology and Obstetrics (Baltimore, Md.), 15(1), 1977, 44-47. Engl.

The Chinese in Singapore believe that there is an association between sterilization and castration in that both operations may result in obesity, physical weakness, and impairment of sexual function. In 1969, Singapore authorities began introducing increasingly stronger social policies for reducing family size that eventually led to a large increase in tubal ligations. It was initially thought that this might lead to a high

incidence of psychological sequelae. A study of 150 women who had had culdoscopic ligations showed that 6.3% were dissatisfied after 2 years. Women with fewer than 4 children or fewer than 2 sons tended to be more dissatisfied with sterilization. Statistical data are included. (Modified journal abstract)

6050 **Erinosho, U.A.** *Concept of mental illness among medical students in Nigeria.* International Journal of Health Education (Geneva), 22(1), 1979, 57-58. Engl.

A survey of medical students at Nigerian universities revealed that 63.3%, despite their training, felt that witchcraft can influence mental illness. In addition, 42.9% affirmed that their personal experiences encouraged them to reckon with witchcraft in their society and that 77.5% believed that traditional medicine could contribute to modern medicine. The implications of this for physician-patient relationships are examined. (DP-E)

6051 **Geber, M.** *Développement des nouveau-nés africains. (Development of African neonates).* Courrier (Paris), 27(5), 1977, 425-434. Fren. 9 refs.

After examining a total of 310 neonates in Uganda, Zambia, and Togo, usually on the 1st or 2nd day of life, the author found significant differences in the weight or motor responses of infants from higher socioeconomic classes. Marked differences were observed between newborns in poorer families from Uganda and Zambia: Zambian infants had lower bodyweight and poorer responses. Environment played a great part in these results. Ugandan women, who followed a more traditional lifestyle, lived in small villages and were well-nourished, while Zambian women had migrated to the city where they were poorly housed and fed and were cut off from the support of their families and villages. (FM)

6052 **Geissler, C., Calloway, D.H., Margen, S.** *Lactation and pregnancy in Iran; I: social and economic aspects.* American Journal of Clinical Nutrition (Bethesda, Md.), 31(1), Jan 1978, 160-168. Engl. 10 refs.
See also entry 6162.

Rapid urbanization has been linked to lactation failure in a number of developing countries. A study of 36 lower socioeconomic and 52 middle class urban Iranian mothers revealed that only 15%-30% of the former and 40%-55% of the latter had an adequate supply of breast milk after 3 months. This paper describes the study methods and findings, pointing out that social factors may be as relevant as economic ones to lactation failure. Data related to the socioeconomic characteristics of the two groups, infant mortality, food beliefs relevant to lactation, and supplemental feeding practices are included. (HC-L)

6053 **Greene, S.B., Salber, E.J., Feldman, J.J.** *Distribution of illnesses and its implications in a rural community.* Medical Care (Philadelphia, Pa.), 16(10), Oct 1978, 863-877. Engl. 40 refs.

The distribution of the utilization of medical services in a rural southern US community is assessed with respect to reported illnesses and related disabilities. It was found that whites reported significantly more illnesses, disabilities, and physician visits than blacks. The differential in utilization may be due to varying interpretations of the survey questions, possibly reflecting different cultures and lifestyles and/or dissimilar expectations from the health care system on the part of blacks, who have experienced greater barriers to access in the past. Statistical data are included. (DP-E)

6054 **Hornabrook, R.W., Serjeantson, S., Stanhope, J.M.** *Relationship between socioeconomic status and health in two Papua New Guinean populations.* Human Ecology (Harkesden, UK), 5(4), 1977, 369-382. Engl. Refs.

The introduction of a cash economy in Papua New Guinea has initiated a broadening range of acculturation and affluence. Two medical surveys assessed the socioeconomic status of 1 982 adults and correlated these with a variety of biological and medical parameters. In one population that had only a brief exposure to modern technology, the authors were unable to identify status-dependent medical conditions, but in the other, more economically differentiated group, weight, respiratory diseases, anaemia, malnutrition, and skin diseases demonstrated the biological advantage of the most affluent class. In general, striking differences in health between socioeconomic groups was not revealed in this study and the authors suggest that either their study was premature or the changes were too subtle for detection. Statistical data are included. (Modified journal abstract)

6055 **Jenkins, D.** *Tuberculosis: the native Indian viewpoint on its prevention, diagnosis, and treatment.* Preventive Medicine (New York), 6(4), 1977, 545-555. Engl. 12 refs.

A survey of 190 individuals from 31 Indian bands in British Columbia, Canada, revealed a strikingly low level of knowledge regarding tuberculosis (particularly among those aged less than 30 years) and widespread negative feelings toward non-Indian health professionals. This paper presents the survey methodology and findings and recommends that Indians be educated in the treatment and prevention of tuberculosis and that tuberculosis control be transferred gradually to the native communities themselves. (HC-L)

6056 **Jussawalla, D.J., Jain, D.K.** *Breast cancer and religion in greater Bombay women: an epidemiological study of 2130 women over a 9-year period.* British Journal of Cancer (London), 36(5), 1977, 634-638. Engl.

From 1964-1972, in Bombay, India, 2 130 women of different religious faiths were diagnosed to have breast cancer. The average annual age-adjusted (world population) rates were found to be 48.5 and 18.2:100 000 in the Parsis and non-Parsis respectively, with an average of 19.9:100 000 for the total population. For reasons not yet clear, in every age group the incidence in Parsis was 2-3 times higher. Data from death certificates for the same period show an age-adjusted mortality of 9.2:100 000. Statistical data are included. (Modified journal abstract)

6057 **Kapur, R.L.** *Role of traditional healers in mental health care in rural India.* Social Science and Medicine (Oxford, UK), 13B(1), Jan 1979, 27-31. Engl.

Surveys indicate that 30-40 million Indians suffer serious psychiatric problems, but there are only 500 psychiatrists, 400 clinical psychologists, and 100 psychiatric social workers with Western training in the entire country. Most mental patients are cared for by indigenous healers. A 1-year study of these healers was carried out in an Indian town with 3 physicians and 23 traditional practitioners of various types. Results show that, with the exception of the condition called "possession", the physicians were preferred by local patients despite their poor psychiatric training. However, the majority of patients had consulted more than one kind of healer. There was no association between choice of healer and age, wealth, or education. Statistical data are included. (Modified journal abstract)

6058 **Kleinman, A., Sung, L.H.** *Why do indigenous practitioners successfully heal?* Social Science and Medicine (Oxford, UK), 13B(1), Jan 1979, 7-26. Engl. 35 refs.

The findings from a follow-up study of patients treated by a traditional practitioner in Taiwan are reported and related to early findings from a larger study of indigenous healers. Some 90% of patients treated by indigenous practitioners suffered from chronic, self-limited, and masked minor psychological disorders (approximately 50%). In the follow-up study, 10-20 consecutive cases treated by a traditional healer rated themselves as at least partially cured, despite a lack of improvement in several cases and a definite worsening of symptoms in one patient. In these cases, behavioural or social gains were responsible for the positive evaluation. (DP-E)

6059 **Landy, D.** *Culture, disease, and healing: studies in medical anthropology.* New York, Macmillan Publishing, 1977. 559p. Engl. Refs.

This textbook on medical anthropology presents essays on 14 aspects of culture, disease, and healing. Chapter 1 introduces anthropological approaches to health, while other chapters examine disease in early humans and the epidemiology and ecology of disease. Chapter 4 analyzes traditional theories of illness. Divination, diagnosis, sorcery, and witchcraft are also discussed. Chapter 7 studies the social and cultural aspects of public health programmes. Chapters 8 and 9 analyze medical knowledge and population control in preindustrial societies. The final chapters concentrate on emotional and cultural factors, covering such topics as response to pain, behavioural disorders, roles of the patient and the traditional healer, and the impact of social change on traditional systems. (FM)

6060 **Maina-Ahlberg, B.** *Machakos Project studies: agents affecting health of mother and child in a rural area of Kenya; XII: beliefs and practices concerning treatment of measles and acute diarrhoea among the Akamba.* Tropical and Geographical Medicine (Haarlem, Netherlands), 31(1), Mar 1979, 139-148. Engl.

An investigation of what rural Kenyan mothers believe about measles and diarrhea and what they do when their children contract these diseases revealed that mothers used modern medical care exclusively in 50% of measles and 63% of diarrhea cases and a combination of modern and indigenous care in 48% and 28%, respectively. Use of traditional medicine alone was extremely rare. Withholding of water and milk from children with measles was practiced by 62% of the women sampled. Variables such as age and education did not influence the type of medical care selected but did influence the use of certain traditional practices. Statistical data are included. (DP-E)

6061 **Micklin, M., Leon, C.A.** *Life change and psychiatric disturbance in a South American city: the effects of geographic and social mobility.* Journal of Health and Social Behaviour (Washington, D.C.), 19(1), 1978, 92-107. Engl. Refs.

Interviews with 68 urban Colombian adults focused on relationships between geographic and social mobility and manifestations of psychiatric symptoms as well as the effects of age, sex, and education. Results indicate significantly higher symptom scores for females and persons with lower educational attainments as well as certain types of social mobility experiences. Variations by age and migration experience are minimal. This study casts some doubt on the stressful effects of migration, tends to support the notion that social mobility is related to psychiatric disturbance, and shows that sex and education are factors that override the influence of either type of mobility experience. Statistical data are included. (Modified journal abstract)

6062 **Mohseni, M.** *Attitude towards modern and traditional medicine in an Iranian community.* Social Science and Medicine (Oxford, UK), 13A(4), Jun 1979, 499-500. Engl.

A 1975 survey of 1 085 urban and 871 rural male household heads collected data on attitudes toward traditional and modern medicine and the use of medical services in a southern province of Iran. The urban sample was more favourable towards modern

medicine and the utilization of health services as compared to the rural sample and there was evidence of a strong link between non-traditional attitudes toward medicine and urbanization, while education had an intermediate effect. There is relative underconsumption by old people, probably due to the fact that they reached maturity before the advent of modern medicine. The poor health status of the work inhabitants is due not only to their socioeconomic disadvantages but also to their lack of knowledge and negative attitudes with regard to public health and the use of medical services. (DP-E)

6063 **Oyebola, D.D.** *Methods of diagnosis and investigation of diseases by Yoruba traditional healers of Nigeria.* Journal of Tropical Medicine and Hygiene (London), 82(2), Feb 1979, 24-29. Engl. Refs.

A survey of 165 Yoruba traditional healers from 31 Nigerian villages focused on the methods used to diagnose patients' problems and the investigative tools used in diagnosis and management. The results revealed that: 79.6% of the herbalists interviewed take patient histories; 46% routinely perform physical examinations, while 20.4% will if the severity of the illness requires it; patients normally remove only those clothes covering the site of their symptoms; and chaperones are not consistently used with female patients. Urine examination is the main diagnostic and management aid. Statistical data are included. (DP-E)

6064 **Pachauri, S.** *Comparison of socio-demographic and fertility characteristics of women sterilized in hospitals and camps.* International Journal of Gynaecology and Obstetrics (Baltimore, Md.), 16(2), 1978, 132-136. Engl. 10 refs.

Sociodemographic characteristics of 5 846 Indian women who underwent sterilization operations in hospital and 1 752 who were sterilized in camps are analyzed. The average age of the women was 29.8 years, while the mean number of living children was 4.2. Women sterilized in hospital were of significantly higher age and parity than those sterilized in camps. The study indicated that, while the level of education may affect acceptance of sterilization, there is no minimum level of education necessary for its acceptance. The majority of these women reported no previous contraceptive practice. Statistical data are included. (Modified journal abstract)

6065 **Prajitno, A., Green, L.W., Windsor, R.A.** *Traditional maternal health beliefs among married women in selected villages of East Java.* International Journal of Health Education (Geneva), 22(1), 1979, 30-37. Engl. 14 refs.

Also published in French, German, and Spanish.

A study was conducted among rural, married Javanese women in three Indonesian villages to identify traditional health beliefs about prenatal, infant, and child health during pregnancy, infancy, and childhood. The study also aimed to assess the strength and salience of traditional maternal child health beliefs and examine the relationships between these beliefs and selected sociodemographic variables that could be used for planning purposes, such as age of mother, duration of marriage, mother's education, number of live children in the family, and infant mortality. The results of this study are discussed and presented as statistical data. (DP-E)

6066 **Rushing, W.A., Miles, D.L.** *Physicians, physicians' assistants, and the social characteristics of patients in southern Appalachia.* Medical Care (Philadelphia, Pa.), 15(12), Dec 1977, 1004-1013. Engl. 30 refs.

Discussions of health care delivery systems and the emergence of new health practitioners, particularly physician's assistants (PAs), usually focuses on the kinds of illnesses PAs are allowed to treat, thus freeing physicians to concentrate on patients with other types of illnesses. This paper studies the possibility that physicians and PAs may also treat patients with different social characteristics. Differences between the status characteristics of physicians and PA patients are reported for a rural community where physicians and PAs work side by side in the same offices. The relationships observed in this community suggest that the higher a patient's socioeconomic status, the more likely the patient will be treated by a physician. Statistical data are included. (Modified journal abstract)

6067 **Salber, E.J., Brogsa, L., Greene, S.B., Feldman, J.J.** *Utilization of services for preventible diseases: a case study of dental care in a southern rural area of the United States.* International Journal of Epidemiology (Oxford, UK). 7(2), Jun 1978, 163-173. Engl. 26 refs.

The utilization of dental services was examined in a small southern rural community in North Carolina (USA) as part of a case study of rural southern patterns of utilization of elective health services. In a household survey, 1 689 persons were interviewed and visited 4 times during 1 year. Though overall utilization of dental services was low and utilization of preventive services even lower in both blacks and whites, blacks were at a considerable disadvantage that was not alleviated by increasing education or maternal utilization practices. Statistical data are included. (DP-E)

6068 **Schamschula, R.G., Adkins, B.L., Barmes, D.E., Charlton, G.** *Betel chewing and caries experience in New Guinea.* Community Dentistry and Oral Epidemiology (Copenhagen), 5(6), 1977, 284-286. Engl. 11 refs.

The prevalence of dental caries and variables relating to the betel chewing habit were examined in a sample of 301 rural Papua New Guineans aged 12-24 years. Consistent inverse associations were demonstrated between caries experience and the intensity of betel

chewing for individuals and groups. The results indicate that betel chewing confers a degree of protection against caries. (Modified journal abstract)

6069 **Sinnet, P., Whyte, M.** *Lifestyle, health and disease: a comparison between Papua New Guinea and Australia.* Medical Journal of Australia (Sydney), 1(1), 14 Jan 1978, 1-5. Engl. 15 refs.

The proposition that lifestyle is a major determinant of community health is explored by contrasting the features of a rural subsistence community in the highlands of Papua New Guinea with those of a community in urbanized, industrialized Australia. The Papua New Guinea community is seen as a self-reliant, self-contained, socially cohesive subsistence society whose members are well adapted to their social and physical environment, free from major degenerative cardiovascular diseases, with little overt psychiatric illness, but with a heavy burden of infectious disease, malnutrition, and infant mortality. The Australians show higher levels of degenerative and mental diseases. It is clear that health is not the prerogative of any one type of society. (Modified journal abstract)

6070 **Turton, D.** *Response to drought: the Mursi of southwestern Ethiopia.* Disasters (Oxford, UK), 1(4), 1977, 275-287. Engl. 18 refs.

The food gathering and cultivation patterns of the Mursi, a tribe of some 4 000 transhumant pastoralists and farmers in southwestern Ethiopia, are described. From 1971-1973, they suffered a drought caused by the failure of the rains for 3 consecutive years. Their efforts to survive included the use of famine foods such as roots and berries, bleeding their cattle more frequently, and increased hunting, fishing, and honey gathering, but the most important factor was the sale of cattle for grain in the highlands. The social effects of the crisis are discussed. The role of hunger in mortality from 1970-1974 was impossible to assess reliably. (Modified journal abstract)

6071 **Viesca Treviño, C. ed(s).** *Estudios sobre etnobotánica y antropología médica. (Studies on ethnobotany and medical anthropology).* Mexico City, Instituto Mexicano para el Estudio de las Plantas Medicinales, 1976. 126p. Span.

The *Instituto Mexicano para el Estudio de las Plantas Medicinales* is devoted to the scientific study of the medicinal plants used within the various medical traditions found in Mexico from preHispanic times up to the present. This book is a compilation of papers on the following diverse topics: the Nahuatl world view and medicine—report of a conference; Alonso López and his surgical compendium (1535-1597); bioanthropological study of the treatment of *susto*, which is the traditional designation for a complex of symptoms resulting from an emotional upset; methodology for the study of medicinal plants; brief study of medical plants in Hueyapan, Morelos; historical outline of the *Instituto Médico Nacional de México*; and the functions of the *Instituto Mexicano para el Estudio de lass Plantas Medicinales*. (HC-L)

6072 **Ward, W.B., Belcher, D.W., Wurapa, F.K., Pappoe, M.E.** *Perception and management of guinea worm disease among Ghanaian villagers; a framework for differential health education planning.* Tropical and Geographical Medicine (Haarlem, Netherlands), 31(1), Mar 1979, 155-164. Engl.

A survey was conducted of 5 Ghanaian villages suffering from an epidemic of guinea worm to assess health-related beliefs and practices that could help health educators devise effective interventions. Interviewers questioned villagers on water use, water treatment practices, and traditional disease control methods. This article discusses the respondents' perceptions of the disease, including such aspects as frequency, susceptibility, seriousness, curability, and preventability. A summary of findings and implications for health education is included in the appendix. It is hoped that the same format could be developed for quick surveys of other diseases. Statistical data are included. (DP-E)

V.7 Epidemiological, Family Planning, Maternal Child Health, Nutrition, and Disease Control Studies

See also: 5636, 5736, 5753, 5760, 5763, 5777, 5778, 5793, 5831, 5866, 5869, 5879, 5881, 6051.

6073 **Abdel-Wahab, M.F., E.-Sahly, A., Zakaria, S., Strickland, G.T., El-Kady, N.** *Changing pattern of schistosomiasis in Egypt 1935-79.* Lancet (London), 2(8136), 4 Aug 1979, 242-244. Engl. 13 refs.

An Egyptian village was surveyed for schistosomiasis in 1935 and again in 1979. The prevalence of *Schistosoma mansoni* infection had increased from 3.2%-73%, whereas *S. haematobium* infection, which had been very common in 1935 (74%), had almost disappeared (2.2%). In the local irrigation canals, snail intermediate hosts for *S. mansoni* have outnumbered those for *S. haematobium* by a ratio of 40:5 for the past 7 years. Changes in the proportions of snail vectors appear to be related to construction of the Aswan High Dam and to changes in the water flow patterns of the Nile. The change in the relative frequencies of the two infections has important public health implications. Statistical data are included. (DP-E)

6074 **Acciarri, G., Eckroad, J.C., Fajardo, L.F., Muñoz, R., de Mercado, R.** *Screening for malnutrition with arm circumference.* Acrhivos Latinoamericanos de Nutrición (Caracas), 27(3), 1977, 343-357. Eng.

The accuracy of anthropometric measurements of midarm circumference as a method for malnutrition screening was tested on 800 preschool children in Colombia. It was concluded that the method is

satisfactory as long as its limitations are recognized. It is more sensitive in acute than in chronic malnutrition and in severe rather than mild cases. It can be more useful in making a rapid evaluation of the nutritional status of the community than in detecting individual cases of malnutrition. It is suggested that the measuring tape should be designed to satisfy specific rather than general needs. Statistical data are included. (DP-E)

6075 **Acciarri, G., Eckroad, J.C., Fajardo, L.F., Muñoz, R., de Mercado, R.** *Comparative analysis of some anthropometric measurements.* Archivos Latinoamericanos de Nutrición (Caracas), 27(3), 1979, 359-375. Engl. 9 refs.

Five nutrition evaluation methods involving anthropometric measurements were compared with regard to accuracy, sensitivity, specificity, cost, and optimum performance in field conditions by testing them on 800 preschool children in Colombia. It was concluded that the Gómez method, in which actual weight is divided by standard weight for age, can be used to detect acute and chronic malnutrition but loses sensitivity in cases of acute malnutrition in children who are tall for their age. Midarm and elbow circumference were suitable for estimation of total malnutrition and head circumference for chronic malnutrition. Statistical data are included. (DP-E)

6076 **Adetosoye, A.I.** *Dermatophytosis survey in Lagos state of Nigeria.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 71(4), 1977, 322-324. Engl.

A dermatophytosis survey of 3 860 schoolchildren conducted in Lagos, Nigeria, from January 1973-January 1974 revealed seven species of dermatophytes (skin fungi) recovered from specimens collected from the hair, skin, and scalp scrapings of 81 (2.10%) of the sample. Species found include *Tricophyton mentagrophytes* (4 isolates), *T. rubrum* (3 isolates), *T. soudanense* (11 isolates), *Microsporum canis* (5 isolates), *M. gypseum* (2 isolates), *M. audouinii* (4 isolates), and *Epidermophyton floccosum* (3 isolates). (Modified journal abstract)

6077 **Adetuyibi, A., Akisany, J.B., Onadeko, B.O.** *Analysis of the causes of death on the medical wards of the University College Hospital, Ibadan over a 14-year period (1960-1973).* Nigerian Medical Journal (Lagos), 8(1), Jan 1978, 28-34. Engl.

An analysis of 4 568 cases from the medical wards of the University College Hospital, Ibadan, Nigeria, over a 14-year period revealed an annual death rate of 300-400. Most of the deaths resulted from cardiovascular diseases, especially hypertension, the mortality from which has shown no appreciable decline over the years. Death from cerebrovascular accident is increasing. Infections contribute considerably to mortality from chest and alimentary tract disease, although there is a progressive decline in mortality from infectious diseases such as tetanus and typhoid fever. Statistical data are included. (DP-E)

6078 **Adé, E.** *Aperçu sur les problèmes nutritionnels en Haïti. (Nutritional problems in Haiti).* Cahiers de Nutrition et de Diététique (Paris), 13, 1978, 21-26. Engl. 17 refs.

Before examining the extent of malnutrition in Haiti, the author outlines the demographic and economic situation of the country. Ignorance and poor hygiene are important factors contributing to high infant mortality . The most common diseases are tuberculosis, malaria, gastroenteritis, infectious diseases such as tetanus, and protein-calorie malnutrition. Malnutrition is widespread and reflects the poor state of health of the population. Massive nutrition education programmes and improved sanitary facilities must be combined with an integd policy of rural development. (FM)

6079 **Agadzi, V.K.** *BCG complications: an analysis of 36 cases.* In Regamey, R.H., ed., Vaccinations in the Developing Countries, Basel, Switzerland, S. Karger, Developments in Biological Standardization, Vol. 41, 1978, 75-78. Engl.
Fifteenth International Congress for Biological Standardization, Le Gosier, Guadeloupe, 16-20 Apr 1978.
For complete document see entry 5792.

Although complications are rare, 36 cases of BCG complications over a 4-year period in Ghana are analyzed by age and sex distribution and by severity of lesion. The most common forms of lesions seen were localized subcutaneous abcesses (generally among toddlers) and regional lymphoadenitis. More serious complications, such as mediastinal involvement, BCG lung infiltration, and BCG papillitis, occurred less frequently. Statistical data are included. (RMB)

6080 **Agadzi, V.K.** *Expanded programme in immunization; Ghana's experience.* In Regamey, R.H., ed., Vaccinations in the Developing Countries, Basel, Switzerland, S. Karger, Developments in Biological Standardization, Vol. 41, 1978, 307-311. Engl.
Fifteenth International Congress for Biological Standardization, Le Gosier, Guadeloupe, 16-20 Apr 1978.
For complete document see entry 5792.

Ghana's expanded programme of immunization is currently running into its 2nd year of operations. Feasibility studies are being conducted to test the possibility of increased coverage using both fixed centre and mobile field teams for vaccinating children aged less than 2 years against measles, poliomyelitis, pertussis, tuberculosis, and smallpox and to test the immunological responses to two doses of pertussis and two of oral polio vaccine. Reports so far indicate some success in the areas of training and manpower development as well as the creation of a cold chain system, which is the most important requirement for an

efficient expanded immunization programme. Statistical data are included. (DP-E)

6081 **Agarwal, A.K., Goel, M.K.** *Problems in the rehabilitation of the physically disabled in rural areas of India.* Prosthetics and Orthotics International (Glasgow, UK), 2(1), Apr 1978, 27-29. Engl.

Some 550 disabled patients were examined by a rehabilitation team who organized a rural camp at Meerut, India. This rehabilitation team consisted of orthopedic surgeons, doctors, a prosthetist, an orthotist, a medical social worker, and other skilled workers. Of these patients, 271 were amputees and 184 cases had poliomyelitis. Males predominated by 4:1. Disability was most common up to the age of 30 years. Of the 271 amputees, 146 were of upper limb. Only 86 lower limb amputees and 87 of the 184 polio cases were suitable for fitting a prosthesis while the others needed surgery or physiotherapy. Ways of reducing the numbers of disabled are examined and improved rehabilitation procedures suggested. Statistical data are included. (Modified author abstract.)

6082 **Abearn, F., Rizo Castellón, S.** *Problemas de salud mental después de una situación de desastre. (Mental health problems following a disaster).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 85(1), Jul 1978, 1-15. Span. 21 refs.

A case review of all patients seen at the Managua national hospital, Nicaragua, in the year prior to and the year following the violent earthquakes of December 1972 was undertaken. The year 1973 saw a 27.2% rise in admissions, an increase in the number of cases of neurosis (especially anxiety, hysteria, depression, etc.), a decrease in admissions for personality disorders, and a reduction in the number of new cases of psychosis. These findings are discussed and compared to others found in the literature. The need to anticipate a rise in the demand for mental health services following such a disaster is pointed out. Statistical data are included. (HC-L)

6083 **Akinkugbe, F.M.** *Prevalence of anaemia in a rural population in Nigeria.* Nigerian Medical Journal (Lagos), 8(4), Jul 1978, 312-318. Engl. 9 refs.

An examination of 701 Nigerian village children revealed that 33% were anaemic with a mean haematocrit value of 32.14%. The percentage prevalence of anaemia seems high but falls gradually with age (from 63% in children aged 1-2 years to 4.3% in those aged 0-10 years). In the anaemic group, 10% of the children showed evidence of malaria, 10% had iron deficiency anaemia, 4% showed marked sickling, and the remaining 76% showed a mixed picture of macrocytosis, hyperchromia, and polychromasia. Statistical data are included. (DP-E)

6084 **Almroth, S.G.** *Water requirements of breast-fed infants in a hot climate.* American Journal of Clinical Nutrition (Bethesda, Md.), 31(7), Jul 1978, 1154-1157. Engl. 30 refs.

To estimate the water requirements of exclusively breast-fed infants in a hot climate, theoretical calculations of water requirements were made and a field study was carried out in Jamaica. When analyses of three urine samples from each of 16 infants indicated that values for specific gravity were universally low, it was concluded that healthy, exclusively breast-fed infants in hot humid climates can manage well without additional water, although it may be desirable during illness. (Modified journal abstract)

6085 **Amidi, S., Ajamee, G., Modarres Sadeghi, H.R., Yourshalmi, P., Gharehjeh, A.M.** *Dispensing drugs without prescription and treating patients by pharmacy attendants in Shiraz, Iran.* American Journal of Public Health (New York), 68(5), May 1978, 495-497. Engl.

In a survey of 30 pharmacies in Shiraz, Iran, 9 pharmacists sold Valium tablets on verbal request, 26 refilled an empty bottle of Cumadine without a prescription, and 15, 26, and 27 pharmacies sold drugs for abdominal pain, diarrhea, and sore throat respectively. The types and amounts given for different symptoms are shown. Further instructions for follow-up referral were seldom offered. Only those who refused to dispense drugs gave advice on physician referral or the need to obtain a prescription. It is recommended that a health education campaign against self-administered drugs be undertaken, laws against drug advertising be enforced, more medical auxiliaries be trained so that people will not have to seek care from pharmacists, etc. (DP-E)

6086 **Arcoverde de Freitas, C.** *Alguns aspectos da epidemiologia e profilaxia da doença de Chagas no Brasil. (Some aspects of the epidemiology and prevention of Chagas' disease in Brazil).* Revista Brasileira de Malariologia e Doenças Tropicais (Rio de Janeiro), 26(27), 1974-1975, 61-92. Portuguese. 56 refs.

The 1st part of this paper discusses the epidemiology, biological cycle, transmission, pathology, reservoirs, and vectors of Chagas disease (trypanosomosis) in Brazil. The 2nd part reviews the disease control measures effected in the different areas of endemicity since 1950. It is pointed out that, while the long-term solution, improved household hygiene, would be preferable, the short-term solution, interruption of the transmission cycle by means of insecticide, is more feasible at present. Spraying programmes often fail, however, not because they are ineffective but because of logistic difficulties. Three maps and eight tables of data are included. (HC-L)

6087 **Areekul, S., Chantachum, Y., Panatampom, P., Niyomdech, N.C.** *Prevalence of anaemia in Thai soldiers.* Southeast Asian Journal of Tro-

pical Medicine and Public Health (Bangkok), 9(1), Mar 1978, 65-70. Engl. Refs.

The prevalence of anaemia was investigated in 281 Thai soldiers by stool examination and measurement of haemoglobin, haematocrit, serum iron, unsaturated iron binding capacity, serum folate, and vitamin B12. Although the prevalence of anaemia in terms of haemoglobin and haematocrit deficiency was 6.4% and 6.8% respectively, a total of 174 cases (62%) were found to be infected with intestinal parasites and 118 (42%) with hookworm. However, study results indicate that hookworm was not a major cause of anaemia in this group. Statistical data are included. (DP-E)

6088 **Armijo, R.** *Cancer registry in Chile: the situation in developing countries.* National Cancer Institute Monographs (Bethesda, Md.), 47, 1977, 71-75. Engl.

In Chile, the 1st population-based cancer registry was established in 1958 and later became part of the overall statistical system. At present, only limited data are being collected. Other Latin America countries developed their registries with PAHO's assistance. However, the author notes that growth of registries in developing countries must be commensurate with the development of data-recording systems in other sectors. The epidemiology of cancer in Chile is also discussed. A high correlation was found between death rates and cumulative *per capita* exposure to nitrogen fertilizers. Statistical data are included. (DP-E)

6089 **Arora, R.R., Choudhury, D.S., Gujral, V.V., Ray, S.N., Das, A.** *Epidemiology of poliomyelitis in Delhi.* Indian Journal of Medical Research (New Delhi), 67(1), Jan 1978, 11-18. Engl.

A survey of 7 years of medical records of 6 hospitals in Delhi, India, shows severe outbreaks of poliomyelitis in 1971 and 1975 with 1 532 and 1 387 cases admitted, respectively. Roughly equal numbers of patients came from the city and the surrounding countryside. The disease was infantile, occurring mainly in children aged 7-11 months and 2-3 years with a 2:1 ratio of males to females. In 1974 and 1975, there were 57 cases who had had oral polio vaccine. Since type 1 virus predominated, the authors suggest that the vaccine might be improved by using a greater amount of type 1 virus in the mixture. Statistical data are included. (Modified journal abstract)

6090 **Arroyave, G.** *Nutrition in pregnancy: studies in Central America and Panama.* Archivos Latinoamericanos de Nutrición (Caracas), 26(2), Jun 1976, 129-157. Engl. 17 refs.
Workshop on Latent Effects of Malnutrition and Infection during Pregnancy as Determinants of Growth and Development in the Child, Guatemala City, Guatemala, 12-14 Jan 1974.

Nutrition during pregnancy is recognized as a major health problem, not only for the woman herself, but also for the impact it may have on the present and future of the unborn child. In areas like Central America and Panama, where malnutrition is prevalent, pregnant women suffer from the same nutritional deficits as the general population. These include a lack of protein, calories, vitamin A, riboflavin, iron, and folates. In some instances, the deficit seems greater in the pregnant women than in the population at large. These studies provide evidence that the newborn children of malnourished mothers reflect in some aspects the biochemical changes found in the pregnant woman. Statistical data are included. (Modified journal abstract)

6091 **Asali, A.R., Kanawati, A.A., McLaren, D.S.** *Nutritional profile and length of residence in a slum suburb of Beirut.* Ecology of Food and Nutrition (London), 6(4), 1978, 251-256. Engl. 15 refs.

A survey was conducted among migrant families in a suburban slum near Beirut, Lebanon, to assess changes in food habits following the move from village to city. Questionnaires tested nutritional knowledge and practices. The growth of each family's youngest child was evaluated and the impressions of mothers concerning rural and urban conditions were analyzed. Steady improvements in nutritional knowledge, dietary habits, and child growth were noted and increased with length of urban residence. These results suggest that, contrary to popular belief, urbanization may actually be beneficial to the nutritional status of migrants. (FM)

6092 **Ashcroft, M.T., Urquhart, A.E.** *Treponemal serological tests in Jamaican school children, 1976.* West Indian Medical Journal (Kingston, Jamaica), 27(1), Mar 1978, 26-30. Engl. Refs.

Sera from 899 Jamaican children aged 614 years and attending rural schools were examined by the VDRL test and, if reactive or weakly reactive, by the FTAABS test. Fourteen sera were weakly reactive and 5 of these were positive in the 2nd test, although the cause was not determined. The proportion of children who were reactive to the 1st test was 0.1%, compared to 27.6% in 1973, which suggests that yaws transmission has become rare in Jamaica. The mistaken diagnosis of syphilis by seroreactivity because of yaws contracted in childhood used to be a major problem. With the disappearance of childhood yaws, the value of reactive treponemal tests as evidence of syphilitic infection should be of increasing significance. (Modified journal abstract)

6093 **Assimadi, K., Bégué, P.** *Lambliase de l'enfant: traitement rapide en milieu tropical par le tinidazole en prise unique. (Lambliasis in children: rapid treatment in the tropics by a single dose of tinidazole).* Nouvelle Presse Médicale (Paris), 8(18), 21 Apr 1979, 1516. Fren.

A total of 56 children in Togo suffering from the parasitic disease of lambliasis were followed up after treatment with tinidazole. A single dose of 1 pill per 10 kg bodyweight produced satisfactory results, with most symptoms disappearing in 2-4 days. Parasitological examinations were negative in 54 of the 56 cases. Clinical tolerance of the drug was good; only 5 children reported side effects of nausea and vomiting. (FM)

6094 **Avery, J.G.** *Malaria in the Solomon Islands.* Practitioner (London), 220(1320), Jun 1978, 942-949. Engl.

The malaria eradication programme that was started in the Solomon Islands in 1970 and showed remarkable progress by the end of 1975 is described. A few remaining problems include foci of persisting transmission on some of the larger islands and the increasing refusal of the population to have their houses sprayed with DDT. In addition, the local strain of *Plasmodium vivax* appears to be less responsive to radical treatment by primaquine than in other parts of the world. The author expresses his hope that the Solomon Islands, which became independent in 1978, will be able to implement more effective community health programmes. (DP-E)

6095 **Azubuike, J.C., Ike Izuora, G., Obi, G.O.** *Anaemia in non-sickling Nigerian children around Enugu.* Tropical and Geographical Medicine (Haarlem, Netherlands), 29(4), Dec 1977, 365-368. Engl.

An investigation of 50 anaemic children in Enugu, Nigeria, revealed that their condition could not be attributed to malaria. The parasite rate in the group was 10%. The anaemics seen were non-haemolytic and predominately microcytic-hypochronic. Hookworm infection was found in 10 children, none of them aged less than 2 years, but the major cause of anaemia was the low iron content of the children's diet. Statistical data are included. (Modified journal abstract)

6096 **Bahreini, M., Bahreini, F., Bahreini, B.** *Assessment of nutritional status of children aged 1 to 24 months.* Iranian Journal of Public Health (Teheran), 6(3), Autumn 1977, 86-90. Engl.

For detection of mild to moderate degrees of malnutrition, the midarm:head circumference (MHC) ratio of 458 low-income children from Isfahan, Iran, was studied. Of these children, 31% showed a MHC ratio of above 0.310; 51.75%, from 0.310-0.280; 15.28%, from 0.279-0.250; and 1.97%, less than 0.250. A significant correlation was found between the child's weight and his MCH ratio. Statistical data are included. (DP-E)

6097 **Bailey, W.S., Gibson, C.L., Hoekenga, M.T. ed(s).** *Tropical medicine and hygiene in modern China; as seen by the American tropical medicine delegation in the People's Republic of China, November 1978.* Tropical Medicine and Hygiene News (Wheaton, Md.), 28(3), Jun 1979. Suppl. 62p. Engl.

A delegation of US scientists visited the People's Republic of China in 1978 to: learn about the prevalence, significance, and control of infectious, parasitic, and other tropical diseases; exchange information with Chinese counterparts; and establish contacts for future exchange of information. The delegation's members and its itinerary are listed. This report presents their observations concerning parasitic (including protozoan and helminthic diseases and arthropod and rodent control), viral, bacterial, and other microbial diseases. A section on general health care in China describes that nation's disease control and research efforts, health services organization, and traditional medicine. (DP-E)

6098 **Baker, R.D., Baker, S.S., Margo, G.M., Reuter, H.H.** *Successful use of a soya-maize mixture in the treatment of kwashiorkor.* South African Medical Journal (Capetown), 53(17), 29 Apr 1978, 674-677. Engl. 16 refs.

In a South African hospital, 48 children aged 5 years or less admitted with a clinical diagnosis of kwashiorkor were randomly assigned to two groups. One group was fed milk at a daily cost of $0.30, while the other was fed soya-maize porridge costing $0.06 per day; both groups received the same supportive treatment. Their recovery rates were comparable. Protein intake and the rate of rise of serum albumin and transferrin concentrations were greater in the milk-fed group, but the incidence of diarrhea was significantly less in the children fed soya-maize. Soya-maize porridge is recommended as an effective and inexpensive treatment for kwashiorkor. (Modified journal abstract)

6099 **Balint, O., Anand, K.** *Infectious and parasitic diseases in Zambian children.* Tropical Doctor (London), 9(3), Jul 1979, 99-103. Engl. Refs.

A survey of 6 543 children hospitalized during 1 year in Zambia revealed that 32.7% were admitted for pneumonia, 17.8% for diarrhea, 17.0% for measles, 12.6% for protein-calorie malnutrition, and 11.3% for malaria. The mortality for these diseases was 383, 226, 174, 223, and 78, respectively. Other less common infectious and parasitic diseases found in these patients are also discussed. Statistical data are included. (DP-E)

6100 **Barnes, D.E.** *Epidemiology of dental disease.* Journal of Clinical Peridontology (Copenhagen), 4(5), 1977, 80-93. Engl.

This article examines the epidemiology of dental disease in both developed and developing countries. While developed countries almost always have a high prevalence of dental caries, the formerly low incidence in developing countries is rapidly rising. At the same time, there is a high prevalence of periodontal diseases in all populations, but especially in developing countries, despite the fact that preventive measures have

been available for decades. Consequently, the WHO oral health programme has given prevention its top priority. Maps and statistical data are included. (DP-E)

6101 **Barthel, E.** *Bericht über einen Studienaufenthalt in Indien. (Report on a study tour of India).* Zeitschrift für Erkrankungen der Atmungsorgane (Berlin), 150(3), 1978, 302-306. German.

The author examines the epidemiology of tuberculosis in India and reports on some of the measures for controlling the disease. Tuberculosis mortality is still high and disease control efforts have so far been ineffectual, so that chronic tuberculosis is still common. Despite a low frequency in smoking, the incidence of nonspecific pulmonary disease is also fairly high. (Modified journal abstract)

6102 **Baylet, R., Diebolt, G., Linhard, J., Diop, S.** *Biologie et urbanisation: étude de deux populations Serers; V: protéines sériques chez les adultes des centres coutumiers et des adultes de la même ethnie ayant migré à Dakar. (Biology and urbanization: study of two Serer populations; V: protein levels among adults from rural centres and adults of the same ethnic origins who have migrated to Dakar).* Bulletin de la Société de Pathologie Exotique et de ses Filiales (Paris), 70(6), 1977, 618-632, 647. Fren.

See also entries 6103, 6104, 6105, 6106, and 6215.

Total protein, albumin, and globulin were measured in 132 rural Senegalese villagers and 211 recent urban migrants. Tables give the mean values for different ages and sexes and also the numbers above and below certain arbitrary normal values. The rural group shows a tendency to lower albumin and higher globulin levels, presumably the result of infection. (Modified journal abstract)

6103 **Baylet, R., Diebolt, G., Linhard, J., Diop, S.** *Biologie et urbanisation: étude de deux populations Serers; VI: index hématologiques (hématocrite et hémoglobine) dans deux populations de Serers adultes de centres coutumiers ou urbains. (Biology and urbanization: study of two Serer populations; VI: haematological index (haematocrit and haemoglobin) in two adult Serer populations from traditional or urban centres).* Bulletin de la Société de Pathologie Exotique et de ses Filiales (Paris), 70(6), 1977, 633-636, 647-648. Fren.

See also entries 6102, 6104, 6105, 6106, and 6215.

In order to study the effects of urbanization on anaemia in Africa, the authors compare the haematological parameters of a rural Senegalese population with a group of recent urban migrants. Results show that an urban environment leads to a reduction in the frequency and severity of anaemia. It is rarely found in urban men and then is not severe. Rural men, particularly adolescents, often suffer from a mild form of anaemia. The most severe cases were found in women from rural centres where living conditions accentuate the haematological deficiencies associated with women in both groups. Statistical data are included. (FM)

6104 **Baylet, R., Frament, Diop, S.** *Biologie et urbanisation: étude de deux populations Serers; VII: caractéristiques anthropologiques. (Biology and urbanization; study of two Serer populations; VII: anthropological characteristics).* Bulletin de la Société de Pathologie Exotique et de ses Filiales (Paris), 70(6), 1977, 636-639, 648. Fren.

See also entries 6102, 6103, 6105, 6106, and 6215.

This section of the anthropological study of two Senegalese populations compares body weights of rural and urban groups. Little difference was evident in the two masculine groups. However, there was a significant numbe. of urban women with higher than average weight for age. Statistical data are included. (FM)

6105 **Baylet, R., Sankalé, M., Frament** *Biologie et urbanisation: étude de deux populations Serers; VIII: tensions artérielles. (Biology and urbanization: study of two Serer populations; VIII: blood pressure).* Bulletin de la Société de Pathologie Exotique et de ses Filiales (Paris), 70(6), 1977, 640-642, 648. Fren. 15 refs.

See also entries 6102, 6103, 6104, 6106, and 6215.

The method used to compare blood pressure in this study of rural Senegalese villagers and urban migrants is described and the distribution of results according to age and sex is outlined. Results show that high blood pressure and hypertension are not necessarily associated with urbanization. More rural women suffered from hypertension than their urban counterparts. Statistical data are included. (FM)

6106 **Baylet, R.** *Biologie et urbanisation: étude de deux populations Serers; X: sur les avantages et les inconvénients de la situation urbaine. (Biology and urbanization: study of two Serer populations; X: on the advantages and disadvantages of the urban situation).* Bulletin de la Société de Pathologie Exotique et de ses Filiales (Paris), 70(6), 1977, 645-646. Fren.

See also entries 6102, 6103, 6104, 6105, and 6215.

This section of the study of rural and urban Serer groups in Senegal summarizes the effects of urbanization on general health. Because the majority of urban migrants are aged less than 50 years, hypertension is not yet common. The tendency to obesity among urban women is noted and the greater risk of atheromatosis is underlined. Among the advantages of

urban living is a reduction in the frequency and severity of anaemia. (FM)

6107 **Berry Brazelton, T., Tronick, E., Lechtig, A., Lasky, R.E., Klein, R.E.** *Behavior of nutritionally deprived Guatemalan infants.* Developmental Medicine and Child Neurology (London), 19(3), 1977, 364-372. Engl. Refs.

Neonatal behaviour and psycho-physiological development were studied in 157 Guatemalan infants selected for a long-term prospective study of the effects of chronic malnutrition during pregnancy. Behaviour during the 1st 28 days of life, which reflected neuromotor adequacy and social interaction, was related significantly to gestational age, birth weight, and age of testing. Maternal variables, such as unexpectedly prolonged intervals between pregnancies, maternal height, and socioeconomic group, were also related to neonatal performance. The findings suggest inherited, nongenetic variables that can affect intrauterine conditions unfavourably and perpetuate the depleting effects of poverty from one generation to another. Statistical data are included. (Modified journal abstract)

6108 **Binns, C.W.** *Famine and the diet of the Enga.* Papua New Guinea Medical Journal (Port Moresby, Papua New Guinea), 19(4), Dec 1976, 231-235. Engl. 14 refs.

A 1972 famine in Papua New Guinea that severely affected the food sources of the Enga tribesmen is described. Nutritional surveys were conducted to evaluate the government's relief programme of rice and fish distribution in terms of the predisaster nutritional status of the population. The results are discussed and presented as statistical data. Due to their dependence on sweet potatoes, the diet of the Enga deteriorated even further because they traded the food they did have for the diminishing supply of sweet potatoes. It was agreed that the government programme was discontinued too early. (DP-E)

6109 **Borgoño, J.M., Corey, G.** *Chilean experience with antipoliomyelitis vaccination.* In Regamey, R.H., ed., Vaccinations in the Developing Countries, Basel, Switzerland, S. Karger, Developments in Biological Standardization, Vol. 41, 1978, 141-148. Engl.
Fifteenth International Congress for Biological Standardization, Le Gosier, Guadeloupe, 16-20 Apr 1978.
For complete document see entry 5792.

The epidemiological, immunological, management, and financial advantages of oral attenuated polio vaccine have proven in Chile to be highly efficacious when the vaccine is given to a community by means of permanent programmes with sufficient coverage. Different techniques and administrative strategies in furnishing polio vaccine and the backing of the country's health infrastructure have helped to reduce the incidence to zero. The active role of the community, the steady and permanent adjustment of the programme, the integration of vaccination programmes into local health services, and epidemiological surveillance were also contributing factors. Statistical data are included. (Modified journal abstract)

6110 **Borgoño, J.M., Corey, G.** *Twenty-five years of an integrated vaccinaton programme in Chile.* In Regamey, R.H., ed., Vaccinations in the Developing Countries, Basel, Switzerland, S. Karger, Developments in Biological Standardization, Vol. 41, 1978, 301-306. Engl.
Fifteenth International Congress for Biological Standardization, Le Gosier, Guadeloupe, 16-20 Apr 1978.
For complete document see entry 5792.

Various problems related to vaccination programmes in Chile are considered. Emphasis is placed on proper administration and planning steps in order to obtain the correct epidemiological diagnosis, strengthen the health services infrastructure, ensure financial support, manage resources efficiently, train necessary personnel, etc. The advantages of integrating vaccination programmes into primary care services are noted. Epidemiological surveillance and evaluation are considered essential components of any successful programme. Statistical data are included on mortality and morbidity from measles, poliomyelitis, diphtheria, pertussis, and tuberculosis meningitis. (DP-E)

6111 **Brigaud, M., Aymard, M., Thouvenot, D., Chomel, J.J., Mahmood, R.A.** *Poliomyelitis survey in Middle-East countries.* In Regamey, R.H., ed., Vaccinations in the Developing Countries, Basel, Switzerland, S. Karger, Developments in Biological Standardization, Vol. 41, 1978, 149-148. Engl. 23 refs.
Fifteenth International Congress for Biological Standardization, Le Gosier, Guadeloupe, 16-20 Apr 1978.
For complete document see entry 5792.

A 1976-1977 poliomyelitis survey of Bahrain and Kuwait revealed a total of 29 paralytic cases in Bahrain, 13 of whom were vaccinated infants. Nine of these children had received 3-4 oral vaccine doses; in 3 of them, paralysis occurred less than 1 month after vaccination. Of 119 cases in Kuwait, 35 were vaccinated infants, 4 of whom had received 3-4 doses of oral vaccine and 11 of whom were paralyzed 1 month after vaccination. Information is given on the survey methodology and the strains of poliovirus found. Statistical data are included. (DP-E)

6112 **Brink, E.W., Perera, W.D., Brooke, S.P., Huff, N.R., Staehling, N.W.** *Sri Lanka nutrition status survey, 1975.* International Journal of Epidemiology (Oxford, UK), 7(1), Mar 1978, 41-47. Engl. 17 refs.

An anthropometric survey was conducted of 13 450 children aged 6-72 months from 30 locations in Sri Lanka to collect data on the prevalence and distribution of protein-energy malnutrition. Acute undernutrition, defined as weight-for-height less than 80% of accepted standards, was present in 6.7% of rural children and chronic undernutrition (less than 90% of standard) in 34.7%. Rural children were 16 times more malnourished than an urban control group. Statistical data are included. (DP-E)

6113 **Brown, T.** *Tooth emergence in Australian Aboriginals.* Annals of Human Biology (London), 5(1), 1978, 41-54. Engl.

Patterns of dental development in 125 Australian Aboriginal children, in a growth study at Yuendumu (Australia), were compared with Australians of European origin using mean tooth emergence curves constructed from the two-phased emergence times of left and right side permanent teeth. The Aboriginal children displayed earlier emergence of most teeth during the 2nd phase, an emergence pattern similar to that of other non-European populations. The process of tooth emergence and subsequent alignment in Aboriginals is aided by adequate space and compensating bone growth in the alveolar regions. Statistical data are included. (Modified journal abstract)

6114 **Carrada Bravo, T.** *Tètanos infantil en la República Mexicana; epidemiología, letalidad comparada y prevenciòn. (Infantile tetanus in the Mexican Republic: epidemiology, comparative mortality, and prevention).* Salud Pública de México (Mexico City), 19(5), Sep-Oct 1977, 617-644. Span 21 refs.

This paper reviews statistical data on mortality due to tetanus during the years 1922-1973 in Mexico as a whole and discusses the clinical aspects, epidemiology, and management of the disease in a number of regions. Statistics for recent years reveal that tetanus, particularly neonatal tetanus, persists as a public health problem in some areas. A control programme including massive vaccination of pregnant women and the training of empirical midwives in the proper care of the umbilical cord is recommended. (HC-L)

6115 **Carvajal, L., Lazo, R.F., Paulson, G., Fernández, T.** *Escabiosis en la zona tropical del Ecuador. (Scabies in the tropical zone of Ecuador).* Revista Ecuatoriana de Higiene y Medicina Tropical (Guayaquil, Ecuador), 30(3), 1977, 277-283. Span. 21 refs.

An outbreak of scabies, almost epidemic in proportion, occurred in Ecuador from 1968-1973. In 1973, 200 members of the isolated Cayapa tribe and 285 individuals from the canton of Naranjal were screened for scabies. The disease was diagnosed and substantiated (by the presence of parasites) in 5% of the former and 65% of the latter. This paper describes the clinical and epidemiological aspects of the disease as revealed by the two surveys. Seventeen photographs of patients and scabies mites are included. (HC-L)

6116 **Carvajal, M., Burgess, P.** *Socioeconomic determinants of fetal and child deaths in Latin America: a comparative study of Bogota, Caracas and Rio de Janeiro.* Social Science and Medicine (Oxford, UK), 12C(3/4), Nov 1978, 89-98. Engl. 22 refs.

This study uses data from the UN urban fertility studies sponsored in Bogotá, Caracas, and Rio de Janeiro to test the effect of five socioeconomic variables on fetal and child mortality. These variables were household income, mother's education, mother's participation in the labour force, migration, and incidence of consensual union. The women surveyed in each city were divided into six age groups from 20-24 to 45-49 years of age. The empirical results indicate that the variables do explain a substantial portion of the cross-sectional variation in both fetal and child mortality. Statistical data are included. (Modified journal abstract)

6117 **Chakraborty, A.K., Rahman, A.** *Environmental sanitation and parasitic infection in the rural population of Singur, West Bengal.* Journal of Communicable Diseases (New Delhi), 9(3), 1977, 191-196. Engl.

A 1975 Indian survey that collected 1 117 stool specimens revealed a 78.5% prevalence (877 of the specimens) of parasitic infections. The prevalence of hookworm was 49.4%; of *E. histolytica*, 5.5%; of *G. lamblia*, 15.7%; and of *A. lumbricoides*, 3.1%. About 90.4% of the population was in the habit of defecating in the open field. Although the literacy rate has increased from 19.4% in 1944 to 50.4% in 1975, the number of households using a latrine has shown only a small rise, from 6.4% in 1944 to 9.4% in 1975. This small rise in the number of latrines had no appreciable effect on the prevalence of intestinal parasites. Statistical data are included. (Modified journal abstract)

6118 **Chandra, P., Vendataswamy, G.** *Health and nutritional status of pre-school children in rural Tamil Nadu.* Indian Pediatrics (Calcutta, India), 15(6), Jun 1978, 499-504. Engl.

An anthropometric survey of 600 rural Indian preschool children revealed that 21.7% had 3rd degree, 47.6% had 2nd degree, and 24.9% had 1st degree malnutrition, while 5.7% were normal. On clinical examination, 3% had kwashiorkor, marasmus, or marasmic kwashiorkor; 34% had xerophthalmia; and 58% had nutritionally relevant disorders such as diarrhea, respiratory and parasitic infections, superative otitis media, and pyoderma. The children's immunization status is also discussed. Statistical data are included. (DP-E)

6119 **Chatterjee, A., Mahalanabis, D., Jalan, K.N., Maitra, T.K., Agarwal, S.K.** *Oral rehydration in infantile diarrhoea; controlled trial of a low sodium glucose eletrolyte solution.* Archives of

Disease in Children (London), 53(4), Apr 1978, 284-289. Engl. Refs.

The 1st controlled trial of an oral glucose electrolyte solution based on the optimum pathophysiological needs for rehydration in infant diarrhea is described. The solution, which has a sodium concentration of 50 mmol:l, was administered to 20 Indian infants with moderate or severe malnutrition due to acute diarrhea who were compared to a control group of 19 infants receiving a standrad solution with a sodium concentration of 90 mmol:l. The control group developed hypernatraemia and/or periorbital edema more frequently than the experimental group; also, the low sodium solution eliminated the need for additional free water orally. Statistical data are included. (DP-E)

6120 **Chaurasia, A.R.** *Correlates of age with height and weight of children.* Indian Journal of Pediatrics (Calcutta, India), 45(361), Feb 1978, 48-51. Engl.

This study of schoolchildren in Gwalior, India, measured age, height, and weight. The main components, of these quantities were calculated and, on the basis of these components, an attempt was made to explain the growth pattern of the child in relation to his age, as the growth in height and weight of the child is directly related to his natural growth. Formulae and statistical data are included. (Modified journal abstract)

6121 **Chintu, C., Bathirunathan, N., Patel, J.M.** *Diphtheria at the University Teaching Hospital, Lusaka.* East African Medical Journal (Nairobi), 55(1), Jan 1978, 36-38. Engl. 12 refs.

Diphtheria, although quite common in European countries, has been considered rare in Africa and there are few reports of it in African literature. Some clinicians have refused to recognize its existence and question the inclusion of diphtheria toxoid in African immunization schedules. This article reports what is possibly the 1st published series of 31 diphtheria cases in Zambia for the purpose of reminding medical personnel that diphtheria is far from being eradicated, that it presents in the form seen in temperate countries and requires vigorous and immediate treatment, and that the inclusion of diphtheria toxoid in the immunization schedule is fully justified. (DP-E)

6122 **Chiron, J.P., Denis, F., Samb, A., Sow, A., Diop Mar, I.** *Etude bactériologique des méningites endémo-sporadiques au C.H.U. de Fann à Dakar (1974-1976). (Bacteriological study of endemo-sporadic meningitis at the Hospital Teaching College of Fann, Dakar (1974-1976)).* Bulletin de la Société Médicale d'Afrique Noire de Langue Française (Dakar), 22(3), 1977, 221-230. Fren. 9 refs.

During a 3-year period, 890 cases of purulent meningitis were admitted to the Hospital Teaching College of Fann, Dakar. In some 35% of the cases, the agents responsible were not isolated. Among the meningitis with a positive bacteriology, the ratio of the germ is as follows: pneumococcus, 40.9%; *Haemophilus influenza b.*, 29.7%; meningococcus, 6.7%; enterobacteria, 11%; other germs, 11.7%. The meningococcus declined in respect to previous surveys and the pneumococcus increased. The disease was found mainly in boys (60.7%) aged less than 1 year. The mortality rate was high, fluctuating annually between 40%-45%. Statistical data are included. (Modified journal abstract)

6123 **Chowdhury, A.K., Huffman, S.L., Curlin, G.T.** *Malnutrition, menarche, and marriage in rural Bangladesh.* Social Biology (Chicago, Ill.), 24(4), 1977, 316-325. Engl. Refs.

A survey of 1 155 girls aged 10-20 years, conducted in rural Bangladesh in 1976, showed that the age of onset of menarche has increased in recent years. This increase appears to be associated with malnutrition caused by war, post-war inflation, floods, and famine. Body weight was highly correlated with the age of onset of menarche. A seasonal trend was noted, with the peak occurring in the winter. An increased age of marriage was also noted, which may be correlated with the increased age of menarche. If these patterns continue, it may be expected that fertility among females aged 15-19 will decrease in the future. Statistical data are included. (FM)

6124 **Cohen, N., Clayden, A.D.** *Seasonal variations in weight of children attending an under-fives clinic in Lesotho.* Acta Paediatrica Scandinavica (Stockholm), 67(1), 1978, 25-31. Engl. 12 refs.

The incidence of weight loss between successive visits of 1 243 children attending an under-fivess clinic in Lesotho showed a marked bimodal annual variation, with the peak occurring in September. Season of birth also influenced the distribution of weight-for-age. Children over 18 months showed considerably higher rates of weight loss than children younger than the mean age of weaning. The rate of weight loss, together with seasonal variation, was considerably higher for a group of "regular attenders" at the clinic than for a group of "low attenders". Seasonal influences on growth need to be taken into account in evaluating the quality of care provided by under-fives clinics. Statistical data are provided. (Modified journal abstract)

6125 **Cooper, E., Headden, G., Lawrance, C.** *Caribbean children, thriving and failing, in and out of hospital.* Journal of Tropical Pediatrics (Kampala), 26, Dec 1980, 232-238. Engl. 14 refs.

Follow-up of 68 infants and toddlers admitted to St. Lucia's main hospital showed that, 12 months afterwards, five children had died (three from causes associated with malnutrition) but nearly all the rest showed some catch up growth. Since neither the duration of high energy feeding nor the weight gained in hospital was any indication of the child's weight 6-12 months later, it is concluded that follow-up efforts including home visiting would probably be

more effective than direct metabolic rehabilitation. Statistical data are included. (DP-E)

6126 Cooper, E., Lawrance, C. *Child health passport for St. Lucia.* West Indian Medical Journal (Kingston, Jamaica), 28(1), Mar 1979, 17-23. Engl.

The "Child Health Passport," which resembles the French *Carnet de Santé*, was adapted from Dr. David Morley's "Road-to-Health" card to serve as a patient-related medical record for children in St. Lucia. In June 1978, there were some 20 000 of these cards in circulation at a unit cost of US$0.18. Results of a questionnaire survey of the island's 26 physicians revealed that almost all respondents felt that the card provided a useful health history, helped them diagnose malnutrition and exchange information with other health personnel, and should be used in place of conventional medical records. The card was also well accepted by the public. An example of the card and the statistical results of the survey are included. (DP-E)

6127 Cottingham, J. ed(s). *Bottle babies; a guide to baby foods issue.* Carouge, Switzerland, ISIS—Women's International Information and Communication Service, Mar 1976. 45p. Engl. Refs.

This book examines the issues of bottle-feeding, breast-feeding, and infant malnutrition. The section on malnutrition defines malnutrition and its causes and makes it plain that human milk offers the best solution. A 2nd section on marketing deals with unethical methods, Western culture, and exploitation. Actions that have been taken by Australia, Canada, Denmark, Germany, the Netherlands, Norway, Switzerland, the UK, and the USA, mainly against the Nestle company, are discussed in the last part. There is a list of resources, including names and addresses of organizations working on issues involving multinational corporations, Third World development, and breast-feeding campaigns, and a bibliography. (DP-E)

6128 Coulter, J.B., Akpabio, M.A., Jikeme, S.O., Kay, T. *Neonatal jaundice in northern Nigeria.* Nigerian Journal of Paediatrics (Ibadan), 5(1), 1978, 12-15. Engl. 8 refs.

Investigations of the aetiology of neonatal jaundice in infants attending Ahmadu Bello University Hospital, Kaduna, Nigeria, support other studies that report a higher incidence in males and a direct association with infection, G-6-PD deficiency, and ABO incompatibility. The frequency of the disease in this series was lower than that found in Ibadan and Lagos. The findings of a lower incidence among the Haausa than the Yoruba and Ibo ethnic groups suggests a possible tribal factor in its aetiology and a need for further research. Statistical data are included. (DP-E)

6129 Coward, W.A., Whitehead, R.G., Sawyer, M.B., Prentice, A.M., Evans, J. *New method for measuring milk intakes in breast-fed babies.* Lancet (London), 1(8132), 7 Jul 1979, 13-14. Engl. 14 refs.

A method for the measurement of milk intake in young breast-fed babies is described in which heavy water enrichment in saliva is measured on only two occasions after a single oral dose of heavy water. Values obtained by this method are comparable to those obtained by test-weighing. This new method is recommended for routine testing because it does not interfere with feeding habits or maternal lifestyle and no technical expertise is required of the mother. Test examples from the UK and the Gambia are given. (DP-E)

6130 Dallman, P.R., Barr, G.D., Allen, C.M., Shinefield, H.R. *Hemoglobin concentration in white, black, and oriental children: is there a need for separate criteria in screening for anemia?* American Journal of Clinical Nutrition (Bethesda, Md.), 31(3), Mar 1978, 377-380. Engl. 10 refs.

A study in San Francisco (California, USA) of 1 718 white, 741 black, and 315 oriental healthy, non-indigent children aged 5-14 years revealed that the medium haemoglobin concentration averaged 0.5 g:dl lower in blacks of both sexes than in the control groups, even after screening for abnormal haemoglobin, iron deficiency, and thassalemia minor. These data support the findings of other studies that have concluded that about 10% of normal blacks will be mistakenly diagnosed as anaemic if present standards are used. (DP-E)

6131 Darbari, B.S., Sudarshan, V., Babar, S.N., Agarwal, S. *Investigation of cholera outbreak in Raipur district.* Indian Journal of Medical Research (New Delhi), 66(4), Oct 1977, 562-565. Engl. 9 refs.

A protracted cholera epidemic in Raipur, India, involving 2 125 cases with 289 deaths from December 1974-December 1975, was investigated. A total of 127 (8.0%) of the stool samples and two (1.8%) of the water samples tested were positive for *V. cholera* biotype *el tor*, which has replaced the classical Inaba strain responsible for the 1970 outbreak in the same region; 102 strains were serotype Ogawa, 22 Inaba, and 3 NAG vibrio. The source of infection appeared to be from outside the district. The mortality was higher in rural areas (average 21.3%) than in urban areas (1.44%), possibly due to the poorer medical facilities available in rural areas. (DP-E)

6132 Dayal, R.S., Kumar, R., Kalra, K. *Growth of infants at Agra in different residential and social groups.* Indian Pediatrics (Calcutta, India), 15(1), Jan 1978, 3-12. Engl. 12 refs.

A cross-sectional growth study of infants aged 0-12 months was conducted at Agra, India, and in surrounding villages from 1969-1972. Analysis of the data illustrates the influence of place of residence and the socioeconomic status of the family. Anthropomet-

ric measurements at three key ages (birth, 6 months, and 12 months) are discussed. Measurements on the child at birth were similar for both urban and rural children, but at ages 6 and 12 months weight, crown-to-heel length, and chest circumference were greater for urban children and for those from higher socioeconomic classes. Statistical data are included. (FM)

6133 **de la Loza Saldivar, A.** *Avances de la medicina preventiva en el Instituto Mexicano del Seguro Social en 1975. (Advances in preventive medicine at the Mexican Institute of Social Security in 1975).* Salud Pública de México (Mexico City), 19(5), Sep-Oct 1977, 665-679. Span.

Statistical data on various preventive activities carried out by the *Instituto Mexicano del Seguro Social* during the years 1971-1975 are presented in 12 tables and 12 graphs and briefly discussed. The activities included: communicable disease notification and control (including venereal diseases and tuberculosis); BCG immunization; examinations for rheumatic fever, cervical cancer, and diabetes mellitis; preventive dentistry; and family planning. (HC-L)

6134 **de Sole, G., Kloos, H.** *Transmission patterns of onchocerciasis in southwest Ethiopia.* Parassitologia (Rome), 18(1-2-3), Jan-Dec 1976, 53-65. Engl. 12 refs.

This epidemiological survey of onchocerciasis in southwestern Ethiopia covered three tribes and the three types of transmission patterns known to exist in that country: subsistence farming, coffee farming, and forest. The survey was conducted according to ethnic groups, age, and sex and consisted of the examination of one skin snip from the hip. Low population density in the forest keeps the prevalence of onchocerciasis low (10%) despite the ideal habitat, while in the subsistence farming area, with its unfavourable habitat, the high population forms a disease reservoir with an incidence. Both favourable ecological conditions and dense population in the coffee growing area contribute to a prevalence rate of over 55%. Statistical data are included. (Modified journal abstract)

6135 **Devadas, R.P., Vijayalakshmi, P., Nagalakshmi, P.** *Nutritional profile of selected nursing mothers in Coimbatore City.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 15(11), Nov 1978, 367-370. Engl.

An assessment of the food and nutrient intake of 270 nursing mothers in Coimbatore, India, indicated that their diets were lacking in protein, calcium, iron, retinol, riboflavin, and ascorbic acid; only 76 of those examined did not have symptoms of nutritional deficiency. Teenaged mothers were more malnourished and produced less milk than older mothers. Breast-fed infants showed consistently higher values for all anthropometric measurements. Statistical data are included. (DP-E)

6136 **Devadas, R.P., Sarojini, K.S.** *Evaluating the impact of nutrition/health integrated curriculum on the primary school children and teachers in selected schools in Coimbatore district.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 15(9), Sep 1978, 295-301. Engl.

This study evaluates the impact of an integrated health and nutrition curriculum on selected primary school teachers and children from 40 schools in Coimbatore district, India. After 5 days of intensive training, the teachers instructed their pupils in the production and selection of nutritious foods and the basics of hygiene and environmental sanitation. The children's health knowledge and practices were tested before and 6 months after the programme. The results are discussed and presented as statistical data; they revealed improvements in both areas among both students and teachers. (DP-E)

6137 **Devadas, R.P., Premakumari, S.** *Nutritional impact of school lunch programme on children over a period of five years.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 15(8), Aug 1978, 257-263. Engl. 8 refs.

In 1962, a school lunch programme designed to provide 33% of each child's daily nutritional requirements was initiated in Sri Avinashilingam Junior Basic School, India. The medical records of participants aged 5-11 years were analyzed using the criteria of nutrient intake, anthropometric measurements, biochemical evaluation, clinical assessment, nutritional knowledge of the children, and their educational achievements. The results are discussed and presented as statistical data. This study establishes that the participation of children in a well-organized school lunch programme can bring about significant improvements in nutritional status and educational achievements. (DP-E)

6138 **Dias, L.C., Baruzzi, R.G.** *Prevalence of malaria in Indians of Xingu Indian Reservation (Brazil).* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 72(2), 1978, 210. Engl.

In a 1968 malaria survey in the Xingu Indian Reservation (Mato Grosso, Brazil), the parasitic infestation rate in 101 children aged 2-9 years was 66.3% and the spleen rate in 95 of the children was 92.6%. Since 1969, a malaria control programme carried out on the reservation has treated all fever patients with antimalarial drugs and sprayed houses with DDT every 6 months. In 1976, a survey undertaken in the same area revealed, in 71 children of similar age, an infestation rate of 11.3% (4.2% *Plasmodium vivax*, 4.2% *P. falciparum*, and 2.8% *P. malariae*) and a spleen rate of 44.4%. (DP-E)

6139 **Diop, E.M., Diop, L.** *Tuberculose dans la sphère O.R.L. au Sénégal. (Tuberculosis in E.N.T. practice in Senegal).* Bulletin de la

Société Médicale d'Afrique Noire de Langue Française (Dakar), 23(1), 1978, 43-49. Fren. 10 refs.

The authors discuss the epidemiology of tuberculosis of the ear, nose, and throat in Senegal, studying the frequency of the disease according to age, sex, and ethnic origin. They found that the majority of the cases were males aged less than 30 years. The most common type found in this area is ganglionic tuberculosis, followed by laryngeal and muscular tuberculosis. Other clinical, diagnostic, and therapeutic information is presented. Treatment is based on a combined anti-tuberculosis drug using streptomycin, PAS, and isoniazid. Any surgery performed was primarily for diagnostic purposes. Statistical data are included. (FM)

6140 **Doyle, P., Morley, D., Woodland, M., Cole, J.** *Birth intervals, survival and growth in a Nigerian village.* Journal of Biosocial Science (London), 10(1), Jan 1978, 81-94. Engl. Refs.

The results of an analysis of the intervals between births in Imesi, Nigeria, are discussed and presented as statistical data. The mean interval following births of children who survived to age 1 year was 35.03 months but only 18.8 months following stillbirths or the death of a child aged less than 1 year. The role of postpartum sexual abstention as an explanation for these results is examined. In general, higher birth orders were found to have correspondingly longer birth intervals. One intriguing result was that those children who had ever suffered from kwashiorkor showed a significantly higher preceding mean birth interval and also a higher mean interval to the next birth. (DP-E)

6141 **Ducros, A., Ducros, J.** *Anthropométrie comparée et changement diachronique à Tahiti et Maupiti (Polynésie). (Comparative anthropometry and diachronic change in Tahiti and Maupiti (Polynesia)).* Biométrie Humaine (Paris), 12(2-3-4), 1977, 91-100. Fren. 13 refs.

Anthropometric measurements were made on 117 men and 48 women living in Tahiti and on 71 men and 69 women living in Maupiti, a small isolated island 300 km from Tahiti. Although men from Maupiti had a greater energy intake than those from Tahiti, they weighed less and had smaller skinfolds as a result of their greater level of activity. Women from Maupiti were heavier than those from Tahiti. Results are discussed from a threefold point of view, including the influence of lifestyles, microevolutive changes, and genetical heterogeneity in an island people such as the French Polynesians. Statistical data are included. (Modified journal abstract)

6142 **Durand, B., Turpin, A., Relyveld, E.H., Carrie, J., Robert, D.** *Vaccination antitétanique simplifiée; résultats préliminaires d'une étude africaine. (Simplified anti-tetanus vaccination, preliminary results of an African study).* In Regamey, R.H., ed., Vaccinations in the Developing Countries, Basel, Switzerland, S. Karger, Developments in Biological Standardization, Vol. 41, 1978, 3-14. Fren. 23 refs.

Quinzième Congrès International pour la Standardisation Biologique, Le Gosier, Guadeloupe, 16-20 Apr 1978.

For complete document see entry 5792.

A study involving 595 schoolchildren in Cameroon compared two commercialized tetanus anatoxins with an experimental anatoxin, all administered according to a simplified schedule of two injections, 1 year apart. The passive haemagglutination method, used to determine the amount of protection given by each injection, had certain disadvantages but did underline the necessity of two injections to ensure adequate coverage. The two commercialized anatoxins were slightly inferior to the experimental one but had the advantage of being mass produced at moderate cost. Further studies should be encouraged so that developing countries can benefit from simplified mass vaccination programmes using anatoxins with high antigenicity. (FM)

6143 **Dutta, J.K., Gautam, A.P., Misra, B.S., Santhanam, S., Krishna, K.** *Some observations on paediatric cholera (El Tor).* Archives of Child Health (Bombay, India), 19(2), Mar 1977, 25-29. Engl. 8 refs.

A study of 160 cholera patients aged less than 14 years admitted in 1974-1975 to the Infectious Disease Hospital, Delhi, India, is described. Half of the children were aged less than 4 years. Dehydration was mild in 45.6% and severe in 13.8% of the cases. Pyrexia was observed in 43 cases, bronchopneumonia in 1.9%, tympanites in 8.1%, and convulsions in 2 cases, both fatal. Total mortality was 3.75%; fatalities are discussed. It is observed that mortality from cholera is generally higher in children than in adults. Some statistical data are included. (DP-E)

6144 **East African and British Medical Research Council.** *Tuberculosis in Kenya: a second national sampling survey of drug resistance and other factors, and a comparison with the prevalence data from the first national sampling survey.* Tubercule (Edinburgh), 59(3), 1978, 155-177. Engl. 10 refs.

A survey was carried out in 1974 of the same random sample of 11 of 30 districts in Kenya that were surveyed in 1964 to obtain information on the proportion of patients with pulmonary and extra-pulmonary tuberculosis, the prevalence of bacteriologically positive pulmonary tuberculosis, the prevalence of initial and acquired drug resistance, the radiographic extent and type of pulmonary disease, and the changes that had occurred in the 10-year period. The results are discussed and presented as statistical data. (DP-E)

6145 **Edungbola, L.D.** *Water utilization and its health implications in Ilorin, Kwara state, Nigeria.* Acta Tropica (Basel, Switzerland), 37, 1980, 73-81. Engl. Refs.

The problem of water utilization and its possible health hazards was investigated in 10 sites in rural Nigeria. The findings revealed that the demand and search for water as well as contact with it reached the peak between February and April, which coincided with the hottest and driest months of the year. During this adverse period, indications are sufficiently strong to conclude that potentials for the transmission and dissemination of infectious diseases of public health significance, such as schistosomiasis and onchocerciasis, are enormous. Statistical data are included. (Modified journal abstract)

6146 **el-Lozy, M.** *Socioeconomic influences on the weight-height relationship in pre-school children.* Growth (Philadelphia, Pa.), 42, 1978, 55-58. Engl. 10 refs.

Weight-height studies of children from different socioeconomic groups in Iran, India, and Nigeria were compared to growth studies of children in Western countries. The studies were based on a formula explaining height-weight relationships developed by Ehrenberg in 1968, which showed that children aged more than 2 years have a basic shape regardless of size. Results confirmed that malnourished children weighed less than better nourished children of the same height. Maturation time, or the time required to reach the basic shape, increased as the socioeconomic conditions worsened. (FM)

6147 **El-Nofely, A.A.** *Anthropometric study of growth of Egyptian Nubian children.* Human Biology (Detroit, Mich.), 50(2), Jun 1978, 183-208. Engl. Refs.

Anthropometric measurements and body proportions of a cross-sectional sample of 1 613 children aged 6-12 years from the three ethnic groups of Egyptian Nubians (Kenouz, Arabs, and Fededji) are reported by age, sex, and ethnic group. The results are discussed and presented as statistical data. The major differences among the three groups are in head and face measurements and their proportions. In general, compared with non-Nubian groups, growth is delayed and continues for a longer period because of suboptimal environmental conditions. However, some of the differences between the three ethnic groups appear to be genetic. (Modified journal abstract)

6148 **Fall, M., Kuakuvi, N., Kessie, F., Martin, L.S., Sanokho, A.** *A propos du kwashiorkor tardif. (Kwashiorkor after the age of 3 years).* Bulletin de la Société Médicale d'Afrique Noire de Langue Française (Dakar), 22(3), 1977, 295-300. Fren.

A total of 112 children aged 42 months-12 years were examined during a 5-year period in Dakar, Senegal, to determine the characteristics of kwashiorkor in older children. Aetiologically, it was observed that kwashiorkor in this age group occurs usually as a result of a famine diet and entails a greater risk of parasitic infection. Severe diarrhea is the most important clinical aspect. It differs from the diarrhea associated with classic kwashiorkor and is more difficult to treat. The mortality in this age group is 33%; treatment is slower and requires a longer period of hospitalization. (FM)

6149 **FAO, Rome.** *Feeding of workers in developing countries; expanded summary prepared by the Food Aid and Feeding Programmes Group of the Food Policy and Nutrition Division, FAO.* Food and Nutrition (Rome), 3(3), 1977, 16-18. Engl.

See also entry 5745.

This is an expanded summary of the results of a 1973 WHO postal survey of feeding programmes for workers in 26 developing countries. The data must be considered biased because of lack of replies from more industrialized developing countries, little information on the feeding of workers in mines, forestry, and agricultural estates, and a high proportion of responses from large, older firms, many of them multinationals established during the colonial period. Although most companies (52%) initiated their programmes to improve the productivity of the workers, only 3% mention this as one of the results. Other benefits include reduced absenteeism (36%), lower turnover (31%), improved worker health (57%), and improved morale (57%). (DP-E)

6150 **FAO, Rome.** *Fourth world food survey.* Rome, FAO, FAO Statistics Series No. 11, FAO Food and Nutrition Series No. 10, 1977. 128p. Engl.

The 1st part of this 4th survey of world food supplies covers food production and population, agricultural production and population, *per capita* food supplies, and classes of foodstuffs. The 2nd part deals with the identification of the malnourished, the incidence of malnutrition, and the estimation of the energy deficit. Included in appendices are statistical data concerning growth of population and food, the daily supply of energy and protein for different countries, etc. (DP-E)

6151 **Farid, H., Jalayer, T.** *Prevalence of intestinal parasites in schoolchildren of Isfahan, central Iran.* Journal of Parasitology (Chicago, Ill.), 64(2), 1978, 364. Engl.

Stool samples from Iranian schoolchildren aged 6-18 years were examined by a variety of tests for intestinal parasites. Of 1 096 samples, 92.7% contained helminth eggs. *Ascaris* was present in 900 of the samples, *Trichuris* and *Trichostrongylus* in 600, and *Hymenolepis nana* in 80. Of the children tested, 20% were infected with one species, 32% with two, 31% with three, and 4% with four. Intestinal protozoa, mainly *Entamoeba coli*, were present in 50.9% of the samples. Statistical data are included. (DP-E)

6152 **Feachem, R.G.** *Environmental aspects of cholera epidemiology; 1: a review of selected reports of endemic and epidemic situations*

during 1961-1980. Tropical Diseases Bulletin (London), 78(8), Aug 1981, 675-698. Engl. Refs.

Literature on cholera in Australia, Bahrain, Bangladesh, Gilbert Islands, Guam, Hong Kong, India, Italy, Israel, Japan, Malaysia, Philippines, Portugal, South Africa, Sri Lanka, Taiwan, the USA, and West Africa from 1961-1980 is reviewed. Information on transmission is summarized in a concluding section. (Journal abstract)

6153 **Fekete, E.** *Pattern of diseases of the skin in the Nigerian guinea savanna.* International Journal of Dermatology (Philadelphia, Pa.), 17(4), May 1978, 331-338. Engl. 19 refs.

The various skin diseases seen in 8 013 patients who attended dermatology clinics in Zaria and Kaduna (Nigeria) are described and analyzed in terms of statistical data. Almost half of the cases were due to infection, mostly parasitic and fungal. The author makes interesting observations on several conditions, including lichen planus, phrynoderma, pigmentary disorders, pruriginous dermatoses, scrotal dermatitis, and a pustular dermatosis affecting the lower legs of young Africans. Although comparisons with the coastal forest belt of Nigeria show interesting differences, such as a higher incidence of onchocerciasis in Lagos and of scabies in Zaria, the report emphasizes the relationship between skin diseases and poverty. (Modified journal abstract)

6154 **Ferro-Luzzi, A., Norgan, N.G., Durnin, J.V.** *Nutritional status of some New Guinean children as assessed by anthropometric, biochemical and other indices.* Ecology of Food and Nutrition (London), 7(2), 1978, 115-128. Engl. Refs.

The nutritional status of 180 Papua New Guinean children aged 0-14 years in two areas where dietary intakes were often less than recommended levels were assessed by various methods. Clinical examination revealed two or more signs of malnutrition in only 6 children. Weight deficits were common and half the children were stunted according to Harvard standards. Other findings are discussed and presented as statistical data. It is concluded that the small body size of these children may represent a successful adaptation to a nutritional and health environment that allows many other indices of nutritional status to be essentially normal. (DP-E)

6155 **Filastre, C.** *Vaccination contre la poliomyélite dans les pays en voie de développement. (Poliomyelitis vaccination in developing countries).* In Regamey, R.H., ed., Vaccinations in the Developing Countries, Basel, Switzerland, S. Karger, Developments in Biological Standardization, Vol. 41, 1978, 187-188. Fren.
Quinzième Congrès International pour la Standardisation Biologique, Le Gosier, Guadeloupe, 16-20 Apr 1978.

For complete document see entry 5792.

The author describes her experiences with poliomyelitis vaccination programmes in Africa from 1969 to the present. A comparison of activated and inactivated vaccines revealed the superiority of the latter in the Ivory Coast region. The development of a new oral vaccine, effective after one injection and a booster, offers new hope for simplified programmes in developing countries. Several factors must still be considered, including the age at which this vaccine can be safely administered, the length of protection, possible interference with measles and whooping cough vaccines, and the cost. (FM)

6156 **Flores González, M.** *Control de triatomíneos con hexaclorociclohèxano en tres departamentos del sur de Perú. (Triatoma control with HCH in three departments of southern Peru).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 84(4), Apr 1978, 324-331. Span. 14 refs.

In 1972, a campaign against Chagas disease (trypanosomiasis) was mounted in three departments of Peru. Some 38 000 households were twice sprayed with a 1.25% suspension of HCH at 60-90 day intervals using Hudson X-pert spray bombs. Evaluation following the initial spraying revealed a reduction in vector *Triatoma infestans* rates upwards of 90%, an index that was maintained 30-40 months after the 2nd spraying. No toxic effects to man or domestic animals were reported. This paper discusses the area, the campaign methodology, the evaluation results, and the surveillance network. (HC-L)

6157 **Floter, W.** *Nuwe statistiese oorsig van velsiektes in die Wes-Kaap. (New statistical review of skin diseases in the western Cape).* South African Medical Journal (Capetown), 53(6), 11 Feb 1978, 214-216. Afrikaans.

Statistics concerning dermatological disease in outpatients seen at the dermatology clinic in Tygerberg Hospital (South Africa) during 1975 are presented. The greatest number of patients suffered from bacterial, mycotic, or parasitic infections. Acne was also prevalent. Except for the photodermatoses and acne, the difference in racial incidence of certain skin conditions is confirmed. More women than men were seen. This might be explained by the fact that, owing to working conditions, men often find it more difficult to attend outpatient clinics during the day. Most patients ranged in aged from 20-60 years. Statistical data are included. (DP-E)

6158 **Fondu, P., Hariga-Muller, C., Mozes, N., Neve, J., van Steirteghem, A.** *Protein-energy malnutrition and anemia in Kivu.* American Journal of Clinical Nutrition (Bethesda, Md.), 31(1), Jan 1978, 46-56. Engl. 54 refs.

This article studies the relationship between protein-energy malnutrition and anaemia in 188 children in Kivu, Zaire. The results of a number of tests are discussed and presented as statistical data. It was concluded that the anaemia found in these children chould be nonadaptive and classifiable, but it could not be explained by isolated iron or vitamin deficiencies. Its physiopathology was distinct from that of anaemia of chronic disorders and it is suggested that selenium deficiency may play an important role in its pathogenesis. (DP-E)

6159 **Fortin, J., Parent, M.A.** *Dehydration scoring system for infants.* Journal of Tropical Pediatrics and Environmental Child Health (London), 24(3), Jun 1978, 110-114. Engl. 11 refs.

A dehydration scoring system for infants is presented and its development detailed. The results of its use during a summer outbreak of diarrhea in 841 Tunisian infants who were treated in both a hospital and maternal child health centres are evaluated and its advantages in diagnosing and monitoring dehydrated infants are stressed. A combination of this score with the Gómez nutritional classification allowed the authors to implement an approach to the problem of diarrhea in a developing country public health programme. Although their experience has been restricted to diarrhea, they point out that the scoring system could be used in any case of dehydration regardless of its cause. Statistical data are included. (Modified author's abstract.)

6160 **Freedman, R.L.** *Review of recently published work dealing with nutrition research in mainland China.* World Review of Nutrition and Dietetics (London), 30, 1978, 1-22. Engl. Refs.

This article reviews 47 works concerning nutrition research in the People's Republic of China, mainly by Chinese authors. Topics covered include diet, the nutritional value of various foods, agricultural production, nutrition, nutrition education, vitamin deficiency, nutrition during pregnancy, the effect of cooking upon food values, methods of food preservation, protein requirements, the results of nutrition surveys, and infant feeding. Statistical data are included. (DP-E)

6161 **Friedmann, P.S., Wright, D.J.** *Observations on syphilis in Addis Ababa; 2: prevalence and natural history.* British Journal of Venereal Diseases (London), 53(5), 1977, 276-280. Engl. Refs.

See also entry 3682 (volume 5) for part 1.

Various epidemiological tests were conducted on patients at the Venereal Disease Centre in Addis Ababa, Ethiopia, to reassess the prevalence of syphilis in that country. Although still prevalent, the disease has declined steadily since previous tests in 1953, largely due to the widespread use of penicillin. Differences in clinical patterns of the disease and immunological reactivity were noted between cases in Ethiopia and England. There are fewer serious complications of the late form of the disease in Ethiopia, probably because of diminished delayed hypersensitivity. (FM)

6162 **Gardiner, A.J.** *Gastroenteritis in Alice Springs.* Medical Journal of Australia (Sydney), 2(4), 26 Nov 1977, Suppl., 6-10. Engl. 31 refs.

A study was made of 136 Aboriginal children with acute gastroenteritis admitted to Alice Springs Hospital, Australia, from September 1, 1975-Februrary 19, 1976. A total of 48% were malnourished, including 7 children who were marasmic. An accelerated weight gain was demonstrated during the recovery phase. Hypokalaemia occurred in 66% and was severe in 13%. Hyponatraemia occurred in 26%, while hypoalbuminaemia (serum albumin levels below 35 g:1), and anaemia occurred in 15% and 22% respectively. Potential faecal pathogens were isolated during 80 of the 130 admissions. Multiple pathogens were common. Interrelationships between nutrition, infection, and immune response are discussed and measures for reducing morbidity and mortality outlined. (Modified journal abstract)

6163 **Geissler, C., Calloway, D.H., Margen, S.** *Lactation and pregnancy in Iran; II: diet and nutritional status.* American Journal of Clinical Nutrition (Bethesda, Md.), 31(1), Jan 1978, 341-354. Engl. 57 refs.

See also entry 6052.

Two groups of urban Iranian women exhibiting high levels of lactation failure were assessed for nutrition status in late pregnancy and nutrition status and dietary intake in the 3rd month postpartum. The indicators of nutrition status included height, weight, haemoglobin, haematocrit, serum total protein, and protein fractions; dietary intake was described and analyzed in terms of the degree to which it met body protein, energy, and nutrition requirements. This paper discusses the results of the investigation, comparing its findings to those of others in the literature. (HC-L)

6164 **Gotsick, P.S., Friedman, R.L., Stith, J.B.** *Development and evaluation of a small ready-reference library collection for a rural practice; a case study.* Bulletin of the Medical Library Association (Baltimore, Md.), 67(2), Apr 1979, 218-225. Engl. 13 refs.

A demonstration core collection of 24 ready-reference sources and 5 journals was selected cooperatively by a solo practitioner in rural Kentucky (USA) and a university medical librarian to fit the information needs of a solo, rural, primary care practice. The collection was systematically assessed by the physician to determine its usefulness in filling his information needs in terms of medical experience and level of training, available library and educational resources, and the type of health problems seen in his practice. Results revealed that the collection completely filled the physician's information needs 66% of the time the materials were consulted and 82% of the time the

collection was searched. Statistical data are included. (DP-E)

6165 **Gracey, M.** *Problem of diarrhoeal disease in children.* Paediatrica Indonesiana (Jakarta), 18(1/2), Jan-Feb 1978, 1-5. Engl. 10 refs.
Second Asian Congress of the Association of Paediatric Societies of the South East Asian Region (APSSEAR), Jakarta, Indonesia, 3-6 Aug 1976.

In western Australia, half the Aboriginal children treated for diarrhea were also afflicted by malnutrition, 25% by sugar intolerance, 33% by anaemia, and 50% by infection and parasitic infestation; multiple conditions are common. Mortality from diarrhea among hospitalized children is over 5% (several times the rate among children of European descent) due to metabolic complications, severe dehydration, coexisting diseases, sugar intolerance, malnutrition, and socioeconomic problems. The main strategy for controlling diarrhea should be prevention by improving maternal and child nutrition, breast-feeding practices, housing and water supplies, health education, and available medical care. (DP-E)

6166 **Grassi, J., Sallaas, V.** *Measles in Paraguay: experience of the Hospital of Infectious and Tropical Diseases of Asunción.* Bulletin of the Pan American Health Organization (Washington, D.C.), 13(2), 1979, 139-146. Engl.
Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana* (Washington, D.C.), 85(3), 1978, 210-219.

This study of 305 measles patients admitted to the hospital of infectious and tropical diseases in Asunción, Paraguay, from 1967-1976, shows that 60% were aged less than 28 months and 77% less than 4 years. In addition, 56.7% of these children had chronic malnutrition. The most frequent complication observed was diarrhea. Bacterial pulmonary complications were the most common cause of death, producing an 18.6% mortality. In view of this strong evidence of the health threat posed by measles in Paraguay and the emphasis now being placed by international health agencies on the eradication of measles in many parts of the world, it is hoped that Paraguayan children will soon receive the benefits of intensive vaccination efforts directed against this disease. Statistical data are included. (DP-E)

6167 **Grivetti, L.E.** *Nutritional success in a semi-arid land: examination of Tswana agro-pastoralists of the eastern Kalahari, Botswana.* American Journal of Clinical Nutrition (Bethesda, Md.), 31(7), Jul 1978, 1204-1220. Engl. 33 refs.

The dietary practices of the Tlokwa, an agro pastoral tribe inhabiting the semi-arid eastern Kalahari Desert in Botswana, were studied over a 2-year period by means of observation, structured interviews, and a questionnaire. On the basis of the study findings, the Tlokwa's ability to survive and even thrive on these drought-prone lands is attributed to their diversified food base (which includes agriculture, animal husbandry, and hunting and gathering), food preservation techniques, cooking methods, age-specific dietary practices, and food distribution mechanisms. This paper describes each of these aspects in detail. (HC-L)

6168 **Gueri, M., Jutsum, P., Knight, P., Hinds, V.** *Arm circumference at birth and its relations to other anthropomeric (sic) parameters.* Archivos Latinoamericanos de Nutrición (Caracas), 27(3), 1979, 403-410. Engl.

The weight, head, chest, and arm circumferences of 461 Jamaican infants were measured during the 1st 24 hours of life to evaluate arm circumference as a possible indicator of the stage of the child's maturity at birth and to correlate this against the other three measurements and against maternal factors. The highest positive correlation was between weight and chest circumference, followed by weight and arm circumference. An attempt to produce an equation to estimate birth weight from arm and chest circumference was considered unsatisfactory. Statistical data are included. (DP-E)

6169 **Gupta, M., Jain, A., Singh, R.N.** *Immunization status of children; comparison between rural, rural health training centre (RHTC) and urban community.* Indian Journal of Pediatrics (Calcutta, India), 45(365), Jun 1978, 206-209. Engl.

A survey of the immunization status of 1 200 rural, urban, and suburban Indian children to obtain data for planning further immunization coverage is described. Statistical data on smallpox, BCG, DPT, and poliomyelitis vaccinations are presented and discussed. The immunization status was poor in rural children as compared to those of other areas due to the inavailability of vaccines and the fact that these children are not included in any of the national vaccination programmes. Health education would also help to dispel fear and ignorance about immunization. (DP-E)

6170 **Gupta, M.C., Ramachandran, K., Tandon, B.N., Mithal, S.** *Health and nutrition survey of heavy manual workers.* Indian Journal of Medical Research (New Delhi), 66(2), Aug 1977, 244-252. Engl. 17 refs.

A health and nutrition survey of 188 Indian labourers carrying out heavy manual work (94 from Dumka and 104 from Garwhal villages) revealed that the diets of both groups were deficient in vitamins A, C, B12, folic acid, and essential fatty acids. In addition, the energy intake was markedly deficient in the Dumka labourers, who also had higher rates of hookworm and anaemia, although their weight-for-height was 83.6% of the standard as compared to 74.8% for the Garwhal villagers. It is suggested that dietary surveys can be useful indicators of the aetiology of nutritional ana-

emia in a community. Statistical data are included. (DP-E)

6171 **Haas, J.D., Baker, P.T., Hunt, E.E.** *Effects of high altitude on body size and composition of the newborn infant in southern Peru.* Human Biology (Detroit, Mich.), 49(4), Dec 1977, 611-628. Engl. Refs.

Anthropometric measurements of 17 Peruvian neonates from high altitudes were compared with those of 45 lowland urban infants after controlling for other variables such as sex, parity, ethnic group, and mother's age. The results are discussed and presented as statistical data; they revealed that measures of body size were all significantly reduced at higher altitudes. It is suggested from this data that most of the fetal growth disruption occurs during the last month of gestation, when fat deposition and limb growth are most notably affected. (DP-E)

6172 **Halbertstein, R.A., Davies, J.E.** *Changing patterns of health and health care on a small Bahamian island.* Social Science and Medicine (Oxford, UK), 13B(2), Apr 1979, 153-167. Engl. 158 refs.

As part of a wide epidemiological investigation of a Bahamian island, this study focuses on the biocultural, demographic, and ecological variables that are shaping the rapidly changing profile of health and disease in this community. The present survey and the study of vital statistics records dating from 1886 indicate that the three major health problems (hypertension, haemoglobinopathies, and infant mortality) are influenced by a number of biosocial factors, including economic behaviour, mate selection, sanitation, dietary habits, and traditional medicine. The effects of improved water supplies, contraception, and the introduction of primary care are also examined. Statistical data are included. (DP-E)

6173 **Hartman, A.F., Jorge João, W.S.** *Desnutrição protéico-calórica na região Centro-Amazônica: relatório preliminar da prevalência e fatores demográficos. (Protein-calorie malnutrition in the Central Amazon region: preliminary report of the prevalence and demographic factors).* Jornal de Pediatria (Rio de Janeiro, Brazil), 45(5), Nov 1978, 323-332. Portuguese. 8 refs.

Surveys carried out among children aged less than 6 years in isolated communities along the Brazilian Amazon revealed high rates of malnutrition (33%), intestinal parasitism (83%), and anaemia (21.6%). A detailed survey using a 10-page questionnaire was completed for 512 children in one of the larger communities. It revealed a strong correlation between malnutrition and maternal socioeconomic and educational status. Sex of the child and order of birth were also found to be significant factors. Three tables and eight graphs of data from the surveys are presented. (HC-L)

6174 **Heymann, D.L., Nakano, J.H., Maben, G.K., Durand, B.** *Field trial of a heat-stable measles vaccine in Cameroon.* British Medical Journal (London), 14 Jul 1979, 99-100. Engl.

Under field conditions in Cameroon, an allegedly heat-stable measles vaccine (Rimevax) showed a negligible loss of titre during exposure to temperatures from 23-25° C for 7 days and induced seroconversion in over 90% of the children vaccinated. Although this does not eliminate the need for a well-controlled cold chain of vaccine conservation, such stability will help to ensure good quality measles vaccine despite the difficulties of distributing it in African countries. Statistical data are included. (DP-E)

6175 **Hijazi, S.S.** *Mortality pattern of infants and young children in rural Amman.* Jordan Medical Journal (Amman), 12(2), Nov 1977, 26-31, Engl.

In order to obtain accurate birth and infant mortality statistics, a cross-sectional study of the clinical, anthropometric, haematological, morbidity, and mortality patterns of 3 734 infants and children was undertaken in 1977 in rural Amman, Jordan. The results revealed an infant mortality of 78:1 000, which was 4.4 times the rate in developed countries. The mortality for children aged 1-4 years (11.4:1 000) was 16 times greater. Half the deaths in the 1st year occurred in the 1st month of life. Statistical data are included. (DP-E)

6176 **Jansen, G.R., Harper, J.M., O'Deen, L.** *Nutritional evaluation of blended foods made with a low-cost extruder cooker.* Journal of Food Science (Chicago, Ill.), 43(3), May-Jun 1978, 912-915, 925. Engl. Refs.

A nutritional evaluation was carried out on corn or sorghum blended with soy or cottonseed and processed using a Brady Crop Cooker to determine protein efficiency ratios (PERs) and levels of antitrypsin activity and free or bound gossypol. The extrusion process inactivated 52% of antitrypsin activity and resulted in a full-fat soy flour with corrected PER of 2.0 (casein=.5). The PER for extruded cotton-soy blends was comparable to casein, while that of extruded cereal-cottonseed blends was significantly inferior, especially at higher extrusion temperatures. The results suggest the utility of this extrusion system in producing low-cost nutritious blended foods for use in supplemental feeding programmes in developing countries. Statistical data are included. (DP-E)

6177 **Jegede, R.O.** *Outpatient psychiatry in an urban clinic in a developing country.* Social Psychiatry (Berlin), 13(2), 1978, 93-98. Engl. Refs.

The author reports on a retrospective case record study of 203 Nigerian outpatients attending an urban psychiatric clinic over a 5-month period. Among the commonest symptoms reported were "heat sensation", paraesthesiae, sleep disturbance, headache, and pain;

57% of the patients suffered from depressive or anxiety neuroses, 11% from schizophrenia, and 6% from organic brain syndrome or epilepsy. Some 65% have been referred from other departments of the same hospital. The author points out several limitations of a study of this kind, notably that information on coexisting physical diseases is incomplete and that there were inconsistencies in recording symptoms and making diagnoses. Statistical data are included. (Modified journal abstract)

6178 **Jhala, C.I., Goel, R.K., Dave, S.K., Dave, A.D.** *Morbidity due to poliomyelitis in urban and rural area of Gujarat in pediatric population—a house to house survey.* Indian Pediatrics (Calcutta, India), 13(11), Nov 1976, 821-825. Engl. 19 refs.

In an Indian survey that included 10 541 urban and 13 373 rural children aged less than 8 years, 45 of the former and 79 of the latter had residual paralytic poliomyelitis (an incidence of 4.23:1 000 and 5.8:1 000 respectively). The incidence of polio morbidity in the general population was 2.1:1 000 urban individuals and 2.8:1 000 rural inhabitants. In 95.4% of urban and 97% of rural cases, the age of onset of the disease was less than 5 years. Most cases occurred in 1969 in the urban area and in 1972 in the rural area. Monoplegia was present in 64% of the urban and 67% of the rural cases. Statistical data are included. (DP-E)

6179 **Joesoef, A., Cross, J.H.** *Distribution and prevalence of cases of microfilaraemia in Indonesia.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 9(4), Dec 1978, 480-488. Engl. 9 refs.

Because of resettlement programmes, Indonesian farmers and their families from non-endemic areas are being exposed to diseases such as filariasis to which they have no acquired immunity. In order to gather accurate information on filariasis epidemiology for disease control planning, large scale surveys of most major villages were carried out in 1970 by means of blood smear collection. A total of 163 434 villagers were examined and 10.8% found positive for microfilaria of *Wuchereria bancrofti*, *Brugia malayi*, or *B. timori*. Copious statistical data are included. (DP-E)

6180 **Kassira, E.N., Abdou, I.A.** *Heights and weights of school children in Baghdad as indications of their nutritional status.* Journal of the Faculty of Medicine Baghdad (Baghdad), 19(3-4), 1977, 119-130. Engl.

The authors present the results of a height and weight survey carried out in 1976 on 3 105 schoolchildren aged 6-20 years in Baghdad, Iraq. The study formed part of a general nutrition survey to obtain reference standards for the whole country. Results showed that average height and weight values varied slightly according to socioeconomic conditions. Growth patterns were similar for both sexes up to age 14 years, after which the rate of growth for girls decreases. Average height for girls was 157 cm; average weight attained was 52.3 kg. Boys attained an average height of 171 cm at 18 years, with an average weight of 64 kg. These figures are considered normal when compared with adjusted US standards. Statistical data are included. (FM)

6181 **Keane, E., Gilles, H.M.** *Lassa fever in Panguma Hospital, Sierra Leone, 1973-6.* British Medical Journal (London), 28 May 1977, 1399-1402. Engl. 10 refs.

A review of 156 cases of Lassa fever admitted to Panguma Hospital, Sierra Leone, from 1973-1976 reveals no absolute diagnostic clinical features, although persistent spiking fever, leucopenia, and proteinuria are suggestive. This article examines the issues of: seasonal, sex, and age distribution; infection from patient to patient, to hospital staff, to relatives, and within households; mortality; serology; and treatment. Statistical data are included. (DP-E)

6182 **Khan, M.Y.** *Analysis study of factors related to infestation by intestinal parasites in rural school children (report of a pilot study).* Public Health (London), 93(2), Mar 1979, 82-88. Engl. 8 refs.

A pilot study that evaluated the stool specimens of 55 Indian children from two different schools showed an intestinal parasite infestation rate of 62.7%. The most common parasite was *Enterobius vermicularis* (25.4%). The location of the schools and their distances from health services and approach roads had no bearing on the infestation rate. Most of the younger students did not cooperate in the study. Social class, defecation habits, use of footwear, and the presence of dirty nails had a significant relation to the type of parasite and infestation rate. Statistical data are included. (Modified journal abstract)

6183 **Khanjanasthiti, P.** *Anthropometric nutritional classification in Thai infants and preschool children.* Journal of the Medical Association of Thailand (Bangkok), 60, 1977, Suppl. 1, 1-19. Engl.

Normal growth curves for use in Thailand are constructed from data collected from approximately 2 520 Thai preschool children. Curves and tables for weight and height for age, and weight for height, are presented. By analogy with the Gómez system, it is suggested that the children be classified into four groups: normal, and 1st, 2nd, and 3rd degree malnutrition. Copious statistical data are included. (DP-E)

6184 **Kitamoto, O.** *Gastrointestinal infections in Southeast Asia; proceedings of the Second SEAMIC Seminer (sic).* Tokyo, Southeast Asian Medical Information Centre, SEAMIC Publication No. 1, 1975. 251p. Engl. Refs.
Second SEAMIC Seminar, Tokyo, Japan, 9-14 Dec 1974.

Following the list of participants, the agenda, and the opening speeches, the papers from the conference are organized around six main topics pertaining to gastrointestinal diseases. Section 1 contains papers on enteric fever, including the diagnosis and treatment of typhoid fever and cholera. Section 2 covers general and clinical epidemiology with papers on statistical studies in several southeast Asian countries. Section 3 presents two papers on diseases due to vibris, while section 4 examinates salmonella infection and infections caused by shigelia, yersiniae, and *E. coli*. Section 5 studies the symptomology, diagnosis, and treatment of intestinal protozoiasis, helminthiasis, and infections from intestinal parasites. The final section reviews laboratory analysis. Many papers contain statistical data. (FM)

6185 **Kloos, H., Lemma, A., Desole, G.** Schistosoma mansoni *distribution in Ethiopia: a study in medical geography*. Annals of Tropical Medicine and Parasitology (Liverpool, UK), 72(5), 1978, 461-470. Engl.

The recent discovery of endemic foci of *Schistosoma mansoni* in widely separated and remote areas of Ethiopia indicates that schistosomiasis is an older disease among Ethiopians than was previously suspected. Altitude, rather than population movement and water use patterns, accounts for much of the spatial distribution of *S. mansoni* and its intermediate hosts. Studies of its distribution among Ethiopian children indicate that the parasite is endemic only at altitudes of between 500-1 000 and 2 000-2 200 m in different parts of the country, but that the development of water resources may result in extension of the endemic areas into some lowlands. Statistical data are included. (DP-E)

6186 **Kuberski, T., Flood, T., Tera, T.** *Cholera in the Gilbert Islands; I: epidemiological features*. American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 28(4), Jul 1979, 677-684. Engl. 21 refs.
See also entry 5795.

An explosive epidemic of cholera due to *Vibrio cholerae* was centered on the coral atoll of Tarawa, Gilbert Islands, in 1977. This outbreak was a unique experience in the region. The principal means of infection at the epidemic's peak was probably through contamination of the main water supply. Lagoon water and shellfish were found to be contaminated and ingestion of raw fish also served as a source of transmission. This outbreak raises the concern that other cholera epidemics may occur on remote and poorly equipped Pacific islands where the environmental circumstances are conducive to cholera spread. Statistical data are included. (Modified journal abstract)

6187 **Kumbouseki, L.** *Enquête familiale et notion de contage chez les tuberculeux hospitalisés aux cliniques universitaires de Kinshasa de 1961 à 1967. (Family surveys and the concept of contagion among tuberculous patients hospitalized in the university clinics of Kinshasa from 1961 to 1967)*. Médecine d'Afrique Noire (Paris), 25(12), Dec 1978, 779-781. Fren. 8 refs.

A retrospective study was carried out on 583 tuberculosis patients in Kinshasa, Zaire, from January 1961-December 1967. Respiratory tuberculosis was the most common form of the disease, accounting for 74.8% of the cases. Family surveys of 88 of the patients revealed 83 positive cases of tuberculosis and 44 suspect cases in the immediate families, suggesting that more importance must be attached to family environment studies as an epidemiological tool. Some statistical data are included. (FM)

6188 **Kwamina Duncan, J.W.** *Prevalence rates of intestinal disease agents in stools examined at Kenyatta National Hospital laboratories, Nairobi, 1972-1976*. East African Medical Journal (Nairobi), 55(5), May 1978, 216-222. Engl.

A review of the 1972-1976 medical records of the parasitology and bacteriology laboratories at the Kenyatta National Hospital, Nairobi, Kenya, showed that 131 992 stool specimens were examined microscopically, of which 76 121 (57.7%) were found to be positive for one or more parasites. Of 16 189 stool cultures carried out from 1974-1976, 1 162 (7.2%) yielded positive isolations for one or more enteropathogenic bacterial agents. *Entamoeba coli* was the most prevalent intestinal parasite (14.9%). Statistical data are included. (DP-E)

6189 **Kyronseppa, H.J., Goldsmid, J.M.** *Studies on the intestinal parasites in African patients in Owamboland, South West Africa*. Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 72(1), 1978, 16-21. Engl. Refs.

The results of a survey of intestinal parasites among 501 inpatients from four African mission hospitals in Owamba and Kavango, West Africa, are discussed and presented as statistical data. Most patients' stool specimens (90%) were examined twice by the formol-ether concentration method, while the rest had one stool specimen examined. Ten species of helminths and three of potentially pathogenic protozoa were found, of which the most common was hookworm. Tests for filaria and bilharzia were negative. The need for proper waste disposal is emphasized. (DP-E)

6190 **Ladnyi, I.D., Breman, J.G.** *Smallpox eradication; progress and problems*. In Regamey, R.H., ed., Vaccinations in the Developing Countries, Basel, Switzerland, S. Karger, Developments in Biological Standardization, Vol. 41, 1978, 281-290. Engl.
Fifteenth International Congress for Biological Standardization, Le Gosier, Guadeloupe, 16-20 Apr 1978.
For complete document see entry 5792.

An historical overview of smallpox and its epidemiology is presented. The last known case of this disease in the world was reported in Somalia on October 27, 1977. If no more cases are discovered, it will be possible, in 1979, to certify that smallpox has been eradicated from all areas of the world and WHO will be able to celebrate an unprecedented victory for preventive medicine. The eradication of smallpox not only liberates the world from one of its most dangerous diseases but also provides an example of what can be done when all countries join together with a common aim. (Modified journal abstract)

6191 **Lal, S., Joshi, V.S., Madan, S.B.** *Viewing the three ongoing intervention programmes—natural experiments for pre-school children.* Indian Pediatrics (Calcutta, India), 15(9), Sep 1978, 781-783. Engl.

Three programmes for preschoolers were observed: a supplementary feeding programme, a combined nutrition/medical care programme, and a family-planning-dominated applied nutrition programme. Nutrition status of children aged less than 6 years, which was ascertained by means of anthropometric measurements, was found to be highest among beneficiaries of the 2nd programme and lowest among those from the 3rd, illustrating the synergic effect of nutrition, immunization, and medical care on the growth of preschool children. (HC-L)

6192 **Larsen, J.V., Muller, E.J.** *Obstetric care in a rural population.* South African Medical Journal (Capetown), 27, 30 Dec 1978, 1137-1140. Engl.

The results of a survey of a rural South African population requiring obstetric care indicated that 56.6% of these women had significant risk factors that warranted hospital delivery. There was also a need for more maternity villages for women awaiting labour, especially in provincial hospitals, because of problems of transport and communications. It is concluded that 85% of at-risk patients can be detected by meticulous antenatal care and admitted to such villages before the onset of labour, with a consequent improvement in perinatal and maternal mortality. The provision of postnatal facilities is discussed and the implications of the survey for staff utilization are examined. Statistical data are included. (DP-E)

6193 **Lechtig, A., Delgado, H., Martorell, R., Yarbrough, C., Klein, R.E.** *Effect of food supplementation on blood pressure and on the prevalence of edema and proteinuria during pregnancy.* Journal of Tropical Pediatrics and Environmental Child Health (London), 24(2), Apr 1978, 70-76. Engl. Refs.

Pregnant women in four rural villages in Guatemala were divided into two groups and given an energy supplement with or without protein. At the end of the 3rd trimester of pregnancy, an evaluation of the women's health revealed that there was no significant difference between the two groups in terms of proteinuria, diastolic blood pressure, or edema of the lower limbs after allowing for maternal home diet, height, head circumference, parity, gestational age, duration of diseases during pregnancy, and socioeconomic status. Statistical data are included. (Modified journal abstract)

6194 **Lowry, M.F., Bailey, R.** *Size of Jamaican newborns from 27-42 weeks gestation.* West Indian Medical Journal (Kingston, Jamaica), 27(3), Sep 1978, 137-146. Engl. Refs.

Birth weight, vertex-heel length, and head circumference were measured in 1 230 newborn infants delivered at the University Hospital of the West Indies, Jamaica, from January 1974-December 1976. The patterns of birth weights at gestational ages based on menstrual history indicated that menstrual history, when used alone, was not a reliable indicator of gestational age. Data for weight, length, head circumference:length ratio at gestational periods from 27-42 weeks as determined by menstrual history confirmed by physical examination are discussed and presented in graphs and tables. Jamaican babies weighed up to 200 g less than their North American counterparts from 32-38 weeks gestation, although there was no notable difference at term. (Modified journal abstract)

6195 **Majekodunmi, S.** *Vernal conjunctivitis in Nigerian children.* Journal of Pediatric Ophthalmology and Strabismus (Thorofare, N.J.), 15(3), May-Jun 1978, 176-178. Engl.

The epidemiology of vernal conjunctivitis in 92 Nigerian children is examined. Males (58) are more affected than females (34). The majority of the patients were aged less than 10 years. The disease is usually chronic and the palpebral form is twice as common as the limbal. More patients are seen in the early wet season and only in about 10% is a history of atopic disease obtained. The variations in the disease in this series may be due to geographical rather than racial factors. Statistical data are included. (DP-E)

6196 **Malapit, S.D.** *Situational analysis of the Philippine Nutrition Program.* Philippine Journal of Nutrition (Manila), 30(3), Jul-Sep 1977, 101-105. Engl.

Nutrition committees have been organized in all regions of the Philippines to train nutrition workers and conduct nutrition surveys. By March 1977, over 5 million preschool children had been weighed, of whom 47.1%, 24.9%, and 5.8% were malnourished to the 1st, 2nd, and 3rd degrees, respectively. The surveys are also meant to detect vitamin deficiencies. Assistance programmes include home food production schemes, welfare foods with emphasis on foods produced in the Philippines and a token payment to avoid the dole mentality, health and nutrition education, and family planning. (Modified journal abstract)

6197 **Mamtani, R., Malhotra, P., Gupta, P.S., Jain, B.K.** *Comparative study of urban and rural tetanus in adults.* International Journal of Epidemiology (Oxford, UK), 7(2), Jun 1978, 185-188. Engl. 10 refs.

An analysis of 240 patients aged more than 15 years admitted to the tetanus ward of Irwin Hospital, New Delhi, India, indicated that 134 (55.8%) came from rural areas and 106 (44.2%) from urban areas, with males predominating 2:1 in both groups. Rural patients were younger (44.8% as compared to 24.5% were aged from 25-34 years), showed a longer incubation period, and had a lower crude case fatality rate (41.8% mortality compared to 64.1%). Traditional practices such as the application of cow dung to wounds, ear piercing and tatooing, and chronic ear infections were important factors in developing tetanus, indicating a need for health education in rural communities. Statistical data are included. (Modified journal abstract)

6198 **Mangay-Angara, A., Fulgencio, L., Casabal, G., Gudani, L., Sampaico, J.** *Two-dose schedule for immunization of infants using a more concentrated DPT-vaccine.* In Regamey, R.H., ed., Vaccinations in the Developing Countries, Basel, Switzerland, S. Karger, Developments in Biological Standardization, Vol. 41, 1978, 15-22. Engl. 16 refs.
Fifteenth International Congress for Biological Standardization, Le Gosier, Guadeloupe, 16-20 Apr 1978.
For complete document see entry 5792.

In a controlled field trial using Philippine infants, a two-dose schedule of a concentrated adsorbed DPT vaccine, with a 6-month interval between injections, was evaluated. The serologic response to the three components in the vaccine was satisfactory, while the side effects did not differ from those of a control DPT group. After two injections, the coverage with DPT vaccine was higher than 70%. The possibility of using this vaccine as the nucleus of a vaccination programme that includes immunization against poliomyelitis, tuberculosis, smallpox, and measles and the possible consequences of the 6-month interval with regard to the spread of pertussis infections are discussed. Statistical data are included. (DP-E)

6199 **Mauldin, W.P.** *Experience with contraceptive methods in less developed countries.* New York, Population Council, Center for Policy Studies Working Papers, Oct 1978. 61p. Engl. Refs.
Symposium on Contraceptive Technology, Washington, D.C., 16-17 May 1978.

The experience of developing countries with various methods of birth control during the past 20 years is reviewed. Topics covered include policies and programmes, laws and regulations, acceptors and users, abortion, characteristics of acceptors, continuation rates, reasons for termination, and unmet needs. Medical and social, religious and cultural, programmatic, and demographic aspects of family planning are also examined. Statistical data are included. (RMB)

6200 **Mbise, R.L., Boersma, E.R.** *Factors associated with low birth weight in the population of Dar es Salaam, Tanzania.* Tropical and Geographical Medicine (Haarlem, Netherlands), 31(1), Mar 1979, 21-32. Engl. Refs.

A study of low-birth-weight infants in Dar es Salaam, Tanzania, reveals that the incidence of low birth weight is higher among female infants and among those whose parents are of a low socioeconomic status. Primiparity, short stature of mother, multiple pregnancy, and toxaemia of pregnancy also influenced fetal growth velocity, leading to an increased incidence of small-for-dates babies. Low maternal age and antepartum haemorrhage mainly affected the duration of gestation and led to a preponderance of preterm infants whose weight was appropriate for their gestational age. However, in 66% of the mothers with low-birth-weight infants, no associated maternal complication of the pregnancy could be detected. Statistical data are included. (DP-E)

6201 **Mehta, S., Gambhir, S.K., Bhandari, A., Kaur, S.** *Evaluation of supplementary feeding programmes for preschool children.* Indian Pediatrics (Calcutta, India), 14(6), Jun 1977, 427-432. Engl.

Two supplementary feeding programmes for 280 Indian preschool children from the lower socioeconomic classes of an urban community were evaluated for their impact on the children's growth, morbidity, and dietary intake and on family attitudes toward infant feeding. On-the-spot feeding of children aged 3-6 years had a beneficial effect on the dietary intake of calories, vitamins, and minerals and also reduced morbidity. The special nutrition programme, which distributed food 250 days per year, was not as successful. It is suggested that greater emphasis on education, community participation, and identification of at-risk families is needed to achieve more tangible results. Statistical data are included. (DP-E)

6202 **Mello Jorge, M.H. de** *Fetal deaths in the district of São Paulo, Brazil.* Bulletin of the Pan American Health Organization (Washington, D.C.), 12(2), 1978, 143-153. Engl. 18 refs.

A study of existing records for fetal deaths in São Paulo, Brazil, from June 1, 1968-May 31, 1970 revealed a higher mortality among males (implying that fewer females are conceived), a relatively high rate of illegitimacy among fetuses less than 20 weeks old, high rates of fetal death associated with multiple pregnancy, a low risk of stillbirth among women aged 20-29 years, and an association between congenital anomalies and increasing maternal age. Suggestions for overcoming difficulties with regard to place of birth, early fetal losses, and cause of death are presented. (RMB)

6203 **Melo, W., Toro, E., Castillo, C., Lama, J., Valdés, V.** *Malnutrición fetal en el Hospital Regional de Chillán; experiencia de un año: 1975-1976. (Fetal malnutrition in the Chillán Regional Hospital; one year's experience: 1975-1976).* Revista Chilena de Pediatría (Santiago), 48(3-4), May-Aug 1977, 141-147. Span. Refs.

A retrospective survey of all newborns admitted to Chillán regional hospital, Chile, during a 1-year period revealed that: out of 757 newborns, 538 were full term, 152 premature, and 67 light-for-dates; the light-for-dates infants were associated with higher incidences of various antenatal, perinatal, and postnatal pathologies; and rural mothers were much less likely to have received antenatal care than urban mothers. These findings are presented in detail and their implications for the hospital and the health services in general are put forward as conclusions. Statistical data are included. (HC-L)

6204 **Meyer, J.D., Gaitán, E., Merino, H., de Rouen, T.** *Geologic implications in the distribution of endemic goitre in Colombia, South America.* International Journal of Epidemiology (Oxford, UK), 7(1), Mar 1978, 25-30. Engl. 24 refs.

A survey of 37 Colombian communities supplied by stream water and receiving iodized salt for the last 10-20 years indicates that the presence of sedimentary rocks in the watersheds of streams more closely correlates with goitre prevalence than 12 other possible causative variables. These results support the hypothesis that sedimentary rocks rich in organic matter are the main source of water-borne goitrogens. Statistical data are included. (DP-E)

6205 **Mitchell, H.S., Santo, S.** *Nutritional improvement in Hokkaido orphanage children, 1960-1970.* Journal of the American Dietetic Association (Chicago, Ill.), 72(5), May 1978, 506-509. Engl.

In 1960, a survey showed that Japanese children living in orphanages were shorter in stature than Japanese children in general. In 1964, food budgets for orphanages were increased and, on Hokkaido, each child was given 180 g milk daily. In 1968, a further dietary improvement and more liberal money allowance provided each child with an egg daily. Data from 1965 and 1970 surveys on food served to these children reflected the improvement. By 1970, the only orphanage children below the national mean stature were the teenaged boys, and, to a lesser extent, the adolescent girls. Weight differences in all three surveys were less striking. Statistical data are included. (Modified journal abstract)

6206 **Mora, J.O., Clement, J., Christiansen, N., Suescum, J., Wagner, M.** *Nutritional supplementation and the outcome of pregnancy; III: perinatal and neonatal mortality.* Nutrition Reports International (Los Altos, Cal.), 18(2), 1978, 167-175. Engl. 20 refs.

As part of a longitudinal study of malnutrition and intellectual development in Bogotá, Colombia, 226 pregnant women were given supplements of dried milk, enriched bread, vegetable oil, vitamin A, and iron, although the improvement in their daily food intake was less than expected because many women either failed to eat the entire supplement or substituted it for part of their regular food. Supplements had no effect on the length of pregnancy. Stillbirth, newborn, and perinatal mortality were respectively 9%, 23%, and 32% in the supplemented group and 36%, 42%, and 63% respectively in the control group of 230 women who did not receive a supplement. Statistical data are included. (DP-E)

6207 **Muangman, D.** *Nutritional problems in Southeast Asia.* Medical Association of Thailand (Bangkok), 60(5), May 1977, 218-224. Engl. 11 refs.

Demographic and nutritional data for developing countries in Southeast Asia are presented. The most vulnerable groups in the area are children aged less than 5 years, pregnant and lactating women, and the elderly; nutritional problems are especially acute in urban slums. The main nutritional problems are: protein-calorie malnutriton, often with associated diarrhea and disease, which affects approximately 1% of the infant and toddler population; growth retardation; vitamin deficiency; nutritional anaemia; goitre; and bladder stones. (DP-E)

6208 **Murdock, A.I.** *Factors associated with high-risk pregnancies in Canadian Inuit.* Canadian Medical Association Journal (Ottawa), 120(3), 3 Feb 1979, 291-294. Engl. 8 refs.

Antenatal risk factors and management problems during labour and delivery were examined for 141 consecutive deliveries of Canadian Inuit (Eskimos). The applicability of three risk scoring systems for antenatal use was also evaluated, of which only two gave statistically valid predictions of pregnancy outcome. Antepartum factors that indicated a significantly increased risk of problems included: maternal age of less than 16 or more than 35 years; previous stillbirth or neonatal death, low-birth-weight baby, or postpartum haemorrhage; tuberculosis therapy in the mother; and any of antepartum haemorrhage, multiple pregnancy, breech delivery malpresentation, or delayed 2nd stage of labour. (DP-E)

6209 **Murray, M.J., Murray, A.B., Murray, M.B., Murray, C.J.** *Adverse effect of iron repletion on the course of certain infections.* British Medical Journal (London), 21 Oct 1978, 1113-1115. Engl. 10 refs.

The incidence of infections was studied in 137 iron deficient Somali nomads, 67 of whom were treated with placebo and 71 with iron. Seven episodes of infection occurred in the placebo group and 36 in the

treated group; these included activation of preexisting malaria, brucellosis, and tuberculosis. This difference suggests that the host defense against these infections was better during iron deficiency than during repletion. Iron deficiency among Somali nomads may be part of an ecological compromise that permits optimum cosurvival of host and infecting agent. Statistical data are included. (Modified journal abstract)

6210 **Muynck, A. de, Silva de Lagrava, M.** *Encuesta sobre parasitosis intestinales en escolares de Yapacani (Bolivia). (Survey of intestinal parasites in schoolchildren from Yapacani, Bolivia).* Boletín Chileno de Parasitología (Santiago), 32(2-3), 1977, 71-72. Span.

The recently colonized rural Bolivian settlement of Yacapani (population 7 599) is characterized by insanitary conditions. Microscopic stool examination of 855 schoolchildren revealed that 96.1% were infected with protozoa or helminths; soil-transmitted helminths were the most frequent. Infection rates by parasite and by the child's area of origin (plateau, valley, or plain—areas of low, medium, and high endemicity, respectively) are tabulated. (HC-L)

6211 **Myres, A.E.** *Breast or bottle feeding: is there really a choice for the Third World?* Cajanus (Kingston, Jamaica), 11(2), 1978, 112-125. Engl. 11 refs.

This article offers a brief resume of current knowledge of the unique properties of human milk and at the same time emphasizes the crucial importance of breast-feeding in the Third World. It covers the scope of the problem, the protective role of breast-feeding, the effect of urbanization on breast-feeding, reasons for the decline in breast-feeding, and additions to the diet of the breast-fed infant. (DP-E)

6212 **Nagi, N.A., Al-Dubooni, H.M.** *Severe protein-energy malnutrition in Iraq, and its effect on immunity reactions.* Journal of Tropical Medicine and Hygiene (London), 80(4), Apr 1977, 78-82. Engl. Refs.

Of 100 consecutive cases of young children with protein-energy malnutrition studied in Iraq's Mosul children's hospital, 90 had marasmus and 5 each had kwashiorkor and marasmic kwashiorkor. At least one infection was present in each child; the most common were diarrhea, chest and urinary tract infections, measles, and tuberculosis. Early weaning, prolonged lactation, dirty bottles, diluted feedings, infection, poverty, and ignorance are believed to be the major causes of malnutrition in Iraq. Statistical data are included. (DP-E)

6213 **Naik, S.S., Pandya, S.S.** *Dapsone in wheat flour as a possible method of therapy in leprosy; a laboratory report.* Leprosy in India (New Delhi), 49(4), Oct 1977, 516-420. Engl. 10 refs.

After chemical analysis had proved that adding dapsone to wheat flour does not alter the structure of the drug, chapatties made from this flour were tested on an Indian family of 4 adults and 3 children to demonstrate its palatability. The patterns of drug absorption and excretion are comparable to those of conventional therapy: it was found that 400 mg dapsone added to 1 kg wheat gives blood levels corresponding to 50-100 mg of daily conventional dapsone therapy for adults and similar levels are obtained for children. Further tests on the families of infectious leprosy patients are recommended. Some statistical data are included. (DP-E)

6214 **Nandi, D.N., Mukherjee, S.P., Boral, G.C., Banerjee, G., Ghosh, A.** *Prevalence of psychiatric morbidity in two tribal communities in certain villages of West Bengal—a cross cultural study.* Indian Journal of Psychiatry (Poona, India), 19(3), 1977, 2-12. Engl. 10 refs.

A field study was conducted in West Bengal, India, to determine the prevalence of psychiatric disorder in a tribal population of 2 362 and in 555 Brahmins in a nearby community. The results are discussed and presented as statistical data. Morbidity among the Brahmins was 4 times the tribal rate (147.7:1 000 and 37.2:1 000 respectively). Depression was common to both groups but neurotic disorders such as anxiety and obsession were more prevalent among the Brahmins. Members of higher socioeconomic levels of both groups and Brahmins living in joint families were especially susceptible. (DP-E)

6215 **Ndo, B., Hounkpe, Y., Baylet, R.** *Biologie et urbanisation: étude de deux populations Serers: IX: caracteristiques électrocardiologiques des deux groupes Serers. (Biology and urbanization; study of two Serer populations; IX: electrocardiographic characteristics of the two Serer groups).* Bulletin de la Société de Pathologie Exotique et de ses Filiales (Paris), 70(6), 1977, 642-645, 649. Fren. 10 refs.

See also entries 6102, 6103, 6104, 6105, and 6106.

Following a description of the methodology used, electrocardiograph results for the rural and urban Serer (Senegal) groups are presented according to age and sex. Certain abnormalities are related to sex rather than urban or rural location and occur equally in the two groups. The types of abnormalities and their distribution are presented in tabular form. (FM)

6216 **Negrón Aponte, H., Jobin, W.R.** *Schistosomiasis control in Puerto Rico; twenty-five years of operational experience.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 28(3), May 1979, 515-525. Engl. 18 refs.

A schistosomiasis control programme was initiated in Puerto Rico in 1953 using limited chemotherapy and snail control. At the same time, extensive programmes of water supply, health education, and latrine distribution were underway throughout the island. An evaluation of the programme's impact revealed that the proportion of children reacting positively to skin tests decreased from 24% in 1963 to 5% in 1976. Eradication of the parasite from Puerto Rico is quite likely in the next few years with the advent of the drug oxamniquine, which would be a cheaper strategy than continued snail control. Statistical data are included. (DP-E)

6217 **Negrón Aponte, H., Ramos-Morales, F., Jobin, W.R.** *Field trial in Ceiba Norte of epidemiological tests for operational evaluation of schistosomiasis control in Puerto Rico.* Boletín de la Asociación Médica de Puerto Rico (Santiago, Puerto Rico), 70(9), Sep 1978, 298-307. Engl., Span. 15 refs.

A diagnostic survey of schistosomiasis in schoolchildren in a small, rural Puerto Rican community was carried out using fecal examinations and three indirect tests (the skin test, the flourescent antibody test, and the slide flocculation test) in order to determine the best indirect test for large surveys. The skin test with adult worm antigen, although unsatisfactory for individual diagnosis because of its low sensitivity, was selected as the most practical for operational evaluation of a large control programme because it gave the best estimate of true prevalence under local conditions and was the simplest and easiest test to perform. Statistical data are included. (Modified journal abstract)

6218 **Odunlan, S.O., Lucas, A.O., Wennes, E.M.** *Immunological response of Nigerian infants to attenuated and inactivated poliovaccines.* Annals of Tropical Medicine and Parasitology (Liverpool, UK), 72(2), 1978, 111-115. Engl. Refs.

In a comparison of live and inactivated polio vaccines, 230 rural Nigerian infants completed the immunization schedules; their levels of neutralizing antibodies to polioviruses were estimated before and during the trial. At 6 months, 74%, 72%, and 86% of non-vaccinated infants lacked antibodies to poliovirus types I, II, and III respectively, while comparative values were 52%, 8%, and 48% after three doses of live vaccine at monthly intervals and 2%, 4%, and 0% after three doses of inactivated poliovaccine. The author suggests that killed poliomyelitis vaccine incorporated into a combination diphtheria, tetanus, and pertussis vaccine may be a valuable aid to disease control programmes in developing countries. (DP-E)

6219 **Ogunmekan, D.A.** *Protecting the Nigerian child against the common communicable diseases.* Tropical and Geographical Medicine (Haarlem, Netherlands), 29(4), Dec 1977, 389-392. Engl. 9 refs.

A survey was conducted of 141 mothers of 243 children in Lagos, Nigeria, to find out how their social, economic, and educational backgrounds affected the immunization status of their children with regard to common communicable diseases. The survey results revealed only 17% coverage for poliomyelitis, 5% for tetanus, 30% for measles, 75% for smallpox (versus 90% of the women themselves), 67% for tuberculosis, and 21% for DPT. To improve immunization coverage, these measures are advocated: reducing the number of required visits to a minimum; easier availability, accessibility, and acceptability of health services; raising the educational level and socioeconomic status of the people; and encouraging maximum utilization of health services by health education. (DP-E)

6220 **Okoisor, A.T.** *Maternal mortality in the Lagos University teaching hospital; a 5-year survey, 1970-1974.* Nigerian Medical Journal (Lagos), 8(4), Jul 1978, 349-354. Engl.

A review of the causes of maternal death at the Lagos University Teaching Hospital (Nigeria) revealed that 44.7% were due to eclampsia, 26.3% to haemorrhage, 15.8% to obstructed labour, 7.89% to anaesthetic death, and 2.6% to infectious hepatitis. Of the 38 deaths, 23 were emergency cases. Suggestions for reducing maternal mortality include health education stressing the importance of blood banks, preventing unqualified doctors and unregistered midwives from practicing obstetrics, limiting general practitioners and midwives to normal pregnancies and deliveries, and earlier referral of emergency cases to hospital. Statistical data are included. (DP-E)

6221 **Oluwande, P.A.** *Public health implications of chemical and bacteriological characteristics of treated water in Western State of Nigeria.* Nigerian Medical Journal (Lagos), 7(1), Jan 1977, 86-90. Engl. Refs.

Chemical and bacteriological examinations of samples of treated water from main water schemes in Nigeria's Western State showed that all the water schemes produced soft water with low nitrate content. In 44% of the schemes, the flouride level was 1-2 mg:litre, and in 28%, 0.6-1, which is the optimum range for the prevailing average daily maximum air temperature limits in the state. The residual chlorine of water from the scheme is very low. This is the reason why all samples obtained from consumers' storage containers are positive for coliforms. The bacteriological standard of water samples obtained directly from taps is satisfactory. Statistical data are included. (Modified journal abstract)

6222 **Opena, M., Ramos, L., Ramoso, T., Inciong, M.B.** *Dietary survey among pregnant and lactating women in a resettlement; 1: dietary practices and beliefs.* Philippine Journal of Nutrition (Manila), 30(3), Jul-Sep 1977,

114-118, 129. Engl.

In a 1976 survey, 39 pregnant and 74 lactating women with an average of 3-4 children in a low-income Philippine resettlement community were interviewed to collect data on socioeconomic status and dietary practices. Information is given on meal planning and preparation, family food consumption patterns, and maternal nutrition habits and beliefs. When planning meals, money was the primary consideration of 66 (58.4%) of the women, family food preferences of 31 (27.4%), neighbours of 4 (3.0%), and nutritional quality of only one. (DP-E)

6223 **Ortega G., M., Beltrán H., F., Zavala V., J.** *Enfermedad de Chagas en Chiapas; estudios clinicoepidemiológicos. (Chagas' disease in Chiapas; clinicoepidemiological studies).* Salud Pública de México (Mexico City), 18(5), Sep-Oct 1976, 837-843. Span. 16 refs.

An investigation into Chagas' disease that involved clinical histories, electrocardiograms, blood testing (fresh blood, blood smears, and thick drop blood), xenodiagnosis, and a search for insect and animal carriers was undertaken in two villages in Chiapas, Mexico. The large percentage of positive xenodiagnoses, the prevalence of vectors in the homes, and the evident anthropofilia of these vectors indicate that transmission of Chagas' disease is now occurring and is likely to increase in view of the accelerated colonization of the area. Further studies are needed to assess the extent to which the disease constitutes a public health problem. Statistical data are included. (HC-L)

6224 **Osuhor, P.C.** *Stillbirths in a savannah district of northern Nigeria.* Medical Journal of Zambia (Lusaka), 12(1), 1978, 18-22. Engl. 10 refs.

Analysis of the records of 1 648 hospital deliveries in the Ahmadu Bello University Rural Teaching Hospital, Malumfashi, Nigeria, from January 1971-December 1974 revealed a stillbirth rate of 95: 1 000 total births, about 5 times the rate in Western countries. Apart from the obstetric factors, which were not considered in this paper, under utilization of the existing facilities, the poor local transport system, the low socioeconomic status, and the sociocultural practices of the population were found to be the obvious contributory factors. Unless measures are taken to raise the socioeconomic status of this population, the stillbirth and perinatal death rates will not be significantly reduced in the near future. Statistical data are included. (DP-E)

6225 **Oyemade, A., Ayeni, O., Onafowokan, E.** *Institutional care of motherless babies; change and challenge.* Tropical and Geographical Medicine (Haarlem, Netherlands), 30(4), Dec 1978, 543-546. Engl.

An earlier survey of Nigerian homes for motherless infants revealed some of the appalling sociomedical problems in these institutions. A 2nd survey of one Ibadan home conducted 8 years later showed that conditions had improved in terms of quality of care, characteristics of attendants, and morbidity and mortality. However, due to the discontinuance of a government-sponsored immunization service, the children were more vulnerable to epidemics of infectious diseases. Suggestions are made for further improving the care of orphaned children. (DP-E)

6226 **Palacios, S.** *Análisis de la situación actual de la malaria en la región. (Analysis of the present status of malaria in the region).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 85(5), Nov 1978, 379-391. Span.

In the late 1950s, malaria control programmes were begun in all endemic countries in the Americas. Despite initial successes, by the early 1970s vector resistence to insecticide, inflexible distribution of resources, and lack of trained personnel had resulted in the stagnation and even the deterioration of the epidemiological situation in a number of countries. These problems are discussed and a country-by-country review of the malaria situation as of 1976 is presented. (HC-L)

6227 **Park, C.B., Han, S.H., Choe, M.K.** *Effect of infant death on subsequent fertility in Korea and the role of family planning.* American Journal of Public Health (New York), 69(6), Jun 1979, 557-565. Engl. 44 refs.

This paper studies the effect of infant death on subsequent fertility in Korea, examining spacing of children and additional births following the survival or death of the preceding infant. The data analyzed consist of 23 635 retrospective birth records of 6 285 women collected during the 1971 national fertility survey. The findings suggest that prior to the introduction of a national family planning programme, the influence of infant death was limited to the biological effect of a shortened lactational period; afterwards, motivational effects to replace the lost child appeared to emerge. Statistical data are included. (Modified journal abstract)

6228 **Paul, F.M.** *Environmental contribution of mental subnormality in Singapore children.* Journal of Tropical Pediatrics and Environmental Child Health (London), 24(3), Jun 1978, 143-147. Engl. 9 refs.

Mental subnormality due to definable prenatal, natal, and postnatal conditions has been reduced in Singapore from 20% in 1963 to 11% at the end of 1971. A survey of 2 962 mentally subnormal children from 1963-1972 revealed that 19.5% of these cases were due, at least in part, to environmental conditions such as giving babies yellow bark (*Coptis chinensis*) and storing their clothes in mothballs. Measures to control these practices have been implemented. In addition,

pest control measures have reduced the incidence of encephalitis, while BCG vaccinations, case-finding, and improvements in housing and nutrition have reduced that of tuberculosis. Some contribution can still be made by family planning (to reduce the incidence of Down's syndrome) and measles and rubella vaccinations. Statistical data are included. (DP-E)

6229 **Perrine, R.P., Pembrey, M.E., John, P., Perrine, S., Shoup, F.** *Natural history of sickle cell anemia in Saudi Arabia; a study of 270 subjects.* Annals of Internal Medicine (Philadelphia, Pa.), 88(1), Jan 1978, 1-6. Engl. 32 refs.

The clinical course of homozygous sickle cell anaemia in 270 Saudi Arabs was followed for an average of 10 years. Compared with comparable groups of American and Jamaican blacks, the Saudis showed lower incidence of all sickling-related complications for which adequate information was obtained. Statistical data are included. (HC-L)

6230 **Petchclai, B., Suwattika, P., Tanphaichitr, D., Tanphaichitr, P., Pongpanich, B.** *Diphtheria and tetanus antitoxin levels in Thai children.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 9(1), Mar 1978, 1-3. Engl.

Tests of diphtheria and tetanus antitoxin levels by an indirect haemagglutination method were conducted on 101 non-immunized Thai schoolchildren, 155 pediatric patients, and 102 blood donors. Diphtheria and tetanus antitoxin levels were found mostly adequate among immunized children. Diphtheria antitoxin levels were found adequate in 68.3% of non-immunized children. Tetanus antitoxin levels were found inadequate for protection in the non-immunized children and adults. Immunization with diphtheria and tetanus toxoids is highly recommended. Statistical data are included. (DP-E)

6231 **Phan, V.T.** *Lutte antipaludique et l'éradication du paludisme dans la Rèpublique Socialiste du Vietnam. (Malaria control and eradication in the Socialist Republic of Vietnam).* Santé Publique (Bucharest), 20, 1977, 147-156. Fren.

The author first describes the epidemiological characteristics of malaria in North and South Vietnam, outlining the geographical distribution of different types of the disease. He then examines the eradication programme underway in North Vietnam, which is based on a step-by-step approach. The results obtained in various stages from 1954 to the present are summarized. During this period, epidemiological surveys were conducted, DDT spraying was begun, mass campaigns were carried out to alert high-risk people, and research was expanded. The final section of the paper analyzes the anti-malaria programme in South Vietnam, where the disease is still endemic, and outlines future activities of the public health department. (FM)

6232 **Pinheiro, F.P., Travassos da Rosa, A.P., Moraes, M.A., Almeida Neto, J.C., Camargo, S.** *Epidemic of yellow fever in Central Brazil, 1972-1973; I: epidemiological studies.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 27(1), 1978, 125-132. Engl. 9 refs.

Laboratory investigations during a 1972-1973 yellow fever outbreak in Brazil confirmed 71 cases of the disease, of which 44 were fatal. The fact that male patients strikingly outnumbered females (9:1) and that young adults aged 11-20 years were predominately affected indicates that disease transmission occurred mainly inside or adjacent to the forests. The lack of cases in urban areas can be attributed to the absence of mosquitoes. The epidemic subsided after an intensive vaccination programme (80% of the population). The need for a continuing yellow fever vaccination programme, especially in rural areas, is demonstrated. Statistical data are included. (DP-E)

6233 **Pradinaud, R., Bertin, C., Grosshans, E., Roche, J.C., Maleville, J.** *Epidèmiologie et traitement de la donovanose en Guyane française (à propos de 9 cas). (Epidemiology and treatment of donovanosis in French Guyana (some 9 cases)).* Bordeaux Médical (Bordeaux, France), 11(3), 1978, 203-208. Fren.

The authors describe nine cases of donovanosis, a venereal disease occurring in hot, humid climates such as that of French Guyana. They advance the theory that the organism is an inhabitant of the lower bowel and can infect the skin in the anogenital region through abrasion, sometimes as an autoinfection. The appearance of the lesions was typically ulcerovegetative and diagnosis was confirmed by histological demonstration of Donovan bodies. In treatment, large doses of treptomycin, injections of 2 g twice daily for 5-11 days, produced rapid drying up of the lesions. The possibility that the condition depends on a lowered cellular immunity, as in lepromatous leprosy, is discussed, but no evidence produced. (Modified journal abstract)

6234 **Puentes R., R., Morales M., R., Isaia, E., Domínguez, I., Mejías, C.** *Desnutriciòn calòrico-proteica severa del lactante; evaluaciòn de actividades de recuperaciòn. (Acute protein-calorie malnutrition; evaluation of recovery measures).* Revista Chilena de Pediatría (Santiago), 43(3-4), May-Aug 1977, 193-202. Span. 35 refs.

A study of 174 children admitted to a nutrition rehabilitation centre in Santiago, Chile, reaffirms the value of this type of effort. Total recovery occurred in 32.9% of the children with 2nd- and 16.2% of the children with 3rd-degree malnutrition; partial recovery was evident in 31.9% of the children with 2nd- and 53.8% of the children with 3rd-degree malnutrition;

and recovery was directly related to the quality, regularity, and length of follow-up and the availability of food supplements. The fact that 50% of the children admitted to the centre were aged 6 months or less indicates a need for nutrition education aimed at their mothers. Details of the study methodology and findings and statistical data are presented. (HC-L)

6235 **Puri, R.K., Khanna, K.K., Balakrishnan, S., Bhargava, I.** *Anthropometry of the newborn and its relation to maternal factors.* Indian Journal of Medical Research (New Delhi), 66(1), Jul 1977, 59-67. Engl. 17 refs.

Anthropometric measurements of 90 male and 101 female Indian infants revealed that birth weight and length were the most suitable criteria for assessment of the newborn. Cross-correlation with maternal factors showed that toxaemia of pregnancy, maternal age greater than 35 years, and parity beyond the 3rd rank were found to retard fetal growth. This underlines the importance of proper maternal welfare in promoting fetal development. Statistical data are included. (DP-E)

6236 **Raccurt, C., Vial, P., Pierre-Louis, J.M.** *Etude èpidèmiologique des helminthiases intestinales a l'Ile de la Tortue (Haïti); 1: prèvalence de la trichocèphalose, de l'ascaridiose et de la nècatorose d'après èlimination des oeufs dans les selles. (Epidemiological survey of intestinal helminthiasis in Tortuga Island (Haiti); I: prevalence of trichuriasis, ascariasis and necatoriasis from elimination of eggs in stool samples).* Bulletin de la Société de Pathologie Exotique et de ses Filiales (Paris), 70(3), 1977, 227-240. Fren. 13 refs.

See also entry 6237.

An epidemiological survey that studied the number of helminth eggs in stool samples was conducted by spot-checks on about 10% of the population of Tortuga Island, Haiti, in order to estimate the prevalence of intestinal helminthiasis. The population sample was representative of the entire island, with the exception of infants, whose stool samples were difficult to obtain. The samples were examined by the Kato method. The results revealed that trichuriasis and ascariasis affected mainly children, while women seemed to be more often infested than men by *Ascariasis lumbricoides*. Necatoriasis, the farmer's disease, was found primarily in young men and elderly women who spend the most time in the fields. Statistical data are included. (Modified journal abstract)

6237 **Raccurt, C., Vial, P., Pierre-Louis, J.M.** *Etude èpidèmiologique des helminthiases intestinales a l'Ile de la Tortue (Haïti); 2: èvaluation de la charge parasitaire par la mèthode de Kato. (Epidemiological survey of intestinal helminthiasis in Tortuga Island (Haiti); 2: evaluation of the parasital load by Kato's method).* Bulletin de la Société de Pathologie Exotique et de ses Filiales (Paris), 70(3), 1977, 240-249. Fren.

See also entry 6236.

Examination of stool samples from a representative population of Tortuga Island, Haiti, shows the importance of parasitic load borne by these people. Young children produce the greatest number of eggs, adult women show a higher number of parasites than men, and farmers in the interior of the island bear a parasitic load that is twice as high as in coastal areas. Victims aged less than 5 years and more than 30, particularly women, whose stool is richest in eggs, present the greatest danger for the transmission of ascariasis and necatorosis in Tortuga Island. Statistical data are included. (Modified journal abstract)

6238 **Ramanujam, K., Sundar, P.R., Khamnei, A.A.** *Ocular leprosy in Iran; findings of a random survey at the Baba Baghi leprosarium, Tabriz.* Leprosy Review (London), 49(3), 1978, 231-239. Engl.

Ocular manifestations in 100 cases of leprosy, mostly lepromatous, in an Iranian group susceptible to serious leprosy are presented. The pathogenesis of the eye involvement is discussed. Its prevention and management are recounted solely with a view to emphasizing the fact that the institution of simple procedures will go a long way to preventing ocular complications of leprosy. Many photographs are included. (Modified journal abstract)

6239 **Rao, K.V.** *Nutritional status of preschool children and the related factors.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 15(7), Jul 1978, 233-244. Engl. 43 refs.

Anthropometric surveys of 6 560 rural Indian children were compared to examine the influence of related factors such as socioeconomic status, culture, age, sex, and season on the children's nutritional status. The results are discussed and presented as statistical data. Because these factors are important, due allowance should be made in methodology for age and sex composition of the population studied and season of the study and the criteria used. Some of the clinical signs of malnutrition were found in children with better growth status, which may de due to non-nutritional factors. (DP-E)

6240 **Rasheed, P., Zaheer, M.** *Health status of expectant mothers.* Journal of the Indian Medical Association (Calcutta, India), 70(4), 16 Feb 1978, 73-77. Engl. Refs.

A study was carried out at the antenatal clinic of J.N. Medical Collect Hospital, Aligarh, India, to assess the health status of expectant mothers. Parity status revealed that the sample ranged from primapara to 13 para. The average conception per mother was 2.51; abortion and stillbirth rates were 20.1 and 56.5:1 000 live births respectively. Morbidity was high (89.3%). The principal causes were vitamin deficiency (57.9%)

and anaemia (27.4%). Pre eclampsia was detected in 4.4%, vaginitis and vulvitis in 13.4%, and the seropositive rate for syphilis was 2.1%. Clinical nutritional assessment revealed that 76% of the mothers showed one or more deficiency signs consequent to an inadequate intake of protective foods. Statistical data are included. (Modified journal abstract)

6241 **Reddaiah, V.P., Nath, L.M.** *Infant mortality in rural areas of Comprehensive Rural Health Services Project, Ballabgarh.* Indian Pediatrics (Calcutta, India), 15(7), Jul 1978, 547-551. Engl. 8 refs.

A review of all births and deaths registered at the primary health centre, Dayalpur, Ballabgarh, Harayana State, India in 1975 revealed that infant mortality was 92.2:1 000 live births, accounted for 32.6% of total mortality, was highest for primiparae, and was mainly due to prematurity, respiratory diseases, malnutrition, neonatal tetanus, and diarrhea. Recommendations call for a combined food supplementation and nutrition education programme, vaccination of all pregnant women with tetanus toxoid, and the raising of the legal age of marriage to 18 years for females. A more detailed analysis of the study data is included. (HC-L)

6242 **Reddaiah, V.P., Ramachandran, K., Nath, L.M.** *Evaluation of working of model registration scheme in Ballabgarh block.* Indian Journal of Medical Research (New Delhi), 67(3), Mar 1978, 467-472. Engl.

Paramedical workers from 660 primary health centres in India have been trained to register the probable cause of all deaths in their areas with the help of a manual specially devised for this purpose. This paper describes and presents the results of a study that was carried out at one of these health centres to determine the adequacy of the manual and the reliability of the data gathered by the workers. Some suggestions for improving the manual are put forward. (HC-L)

6243 **Reed, D.** *Current status of cancer studies in the South Pacific.* National Cancer Institute Monographs (Bethesda, Md.), 47, 1977, 61-66. Engl.

An analysis of cancer incidence and mortality data indicated that cancer has become one of the five leading causes of death in many of the republics and territories of the South Pacific. The most developed areas had rates that exceeded world averages for malignant neoplasms of the lungs, breast, and cervix. The two existing cancer registries of Papua New Guinea and Fiji have documented a number of unusual patterns of cancer incidence that indicate, for example, an association between betel nut chewing and cancer of the mouth and underline the need and the special opportunities for cancer research in the South Pacific. Statistical data are included. (Modified journal abstract)

6244 **Relyveld, E.H.** *Résultats de calendriers de vaccinations simplifiées dans des pays en voie de développement. (Results of simplified vaccination schedules in developing countries).* In Regamey, R.H., ed., Vaccinations in the Developing Countries, Basel, Switzerland, S. Karger, Developments in Biological Standardization, Vol. 41, 1978, 295-299. Fren. 20 refs.
Quinzième Congrès International pour la Standardisation Biologique, Le Gosier, Guadeloupe, 16-20 Apr 1978.
For complete document see entry 5792.

The results of several studies on the immunization of people in developing countries with simplified vaccines adsorbed on calcium phosphate are presented. It was found that immunization against diphtheria and tetanus by two injections 1 year apart is acceptable. Infants can be protected against poliomyelitis by two injections of inactivated trivalent poliomyelitis vaccine followed by a booster 1 year later. Mothers and newborn babies can be protected against tetanus by vaccinating pregnant women with one or two inections of tetanus vaccine. Combined vaccines that enable simultaneous immunization of subjects against a maximum of infections are possible. (Modified journal abstract)

6245 **Richardson, S.A., Koller, H., Katz, M., Albert, K.** *Contributions of differing degrees of acute and chronic malnutrition to the intellectual development of Jamaican boys.* Early Development (Amsterdam), 2(2), 1978, 163-170. Engl. 19 refs.

In this study, the intelligence of 59 Jamaican boys who were hospitalized for malnutrition in infancy was assessed at school age to determine whether differing degrees and types of malnutrition cause differing degrees of mental impairment. The measure used for degree of chronic malnutrition was height for age, and, for acute malnutrition, weight for height. The measure of intelligence was I.Q. Because the social environment in which a child lives influences his intellectual development, a measure of social background was used as an independent variable in addition to the nutrition measures. Social background showed a significant effect on I.Q. but neither measure of nutrition was significant. Statistical data are included. (DP-E)

6246 **Rioux, J.A., Decampa, H., Lanotte, G., Combes, C., Theron, A.** *Ecologie de la schistosomose intestinale en Guadeloupe; analyse du système épidémiologique; documents pour un essai de modélisation. (Ecology of intestinal schistosomiasis in Guadeloupe; epidemiological analysis and data for a model study).* Revue d'Epidémiologie et de Santé Publique (Paris), 25(5-6), 1977, 483-519. Fren. 46 refs.

During a general survey of intestinal schistosomiasis in Guadeloupe, the authors made a structural analysis of a limited focus of infection along a river basin. Results showed that, of the 12 delimited sectors, only two zones, those with ditches and small streams, include both hosts and parasites. The vector density is always high in inhabited areas and the rate, though present over the whole river basin, is only parasitized near inhabitated areas. Fluorescent antibody level is an excellent indicator of the level of infection of the human population. It was also shown that distance from contaminated water is one of the principal risk factors. Maps and statistical data are included. (Modified journal abstract)

6247 **Ripert, C., Riedel, D., Yang, R., Fouda Ouana, A., Zimflou, I.A.** *Etude épidémiologique de l'onchocercose dans cinq villages de la vallée de la Sanaga (Cameroun). (Epidemiological study of onchocerciasis in five villages of the Sanaga valley, Cameroon).* Bulletin de la Société de Pathologie Exotique et de ses Filiales (Paris), 70(2), 1977, 178-186. Fren. 14 refs.

According to this study carried out in five villages in Cameroon, the prevalence rate for onchocerciasis ranges from 36%-57% depending on the village. Prevalence increased with age and the disease was slightly more frequent in males than in females. Visual acuity, blindness, and ocular lesions were also studied in some villages. Results showed that visual acuity rapidly diminished with age, particularly among males. Entomological data underlined the effects of the parasite, the Simulium fly, on the health of the people living near its breeding sites. (FM)

6248 **Robson, J.R., Wadsworth, G.R.** *Health and nutritional status of primitive populations.* Ecology of Food and Nutrition (London), 6(3), 1977, 187-202. Engl. Refs.

The authors review 204 documents on diet, infectious diseases, and carcinogenesis in Aborigines, Kalahari Bushmen, tribes from Papua New Guinea, Alaskan and Canadian Eskimos, and Andean Indians. In the communities most affected by malnutrition, infectious diseases are equally common, with a high mortality from bith to age 2-3 years. The effects of parasitic diseases, malaria, and tuberculosis are discussed. The epidemiology of cancer among these populations is also examined. (DP-E)

6249 **Rodríguez-Domínguez, J.** *Estrategias para mejorar la atención de la salud; V: investigación y evaluación de los servicios de salud. (Strategies for improving health care; V: research and evaluation of health services).* Gaceta Médica de México (Mexico City), 115(8), Aug 1979, 339-343. Span.
Simposio sobre Estragegias para Mejorar la Atención de la Salud, Mexico City, Mexico, 23 Aug 1978.

This paper discusses the nature, aims, and problems related to the process of evaluation in the health sector and the relationship between evaluation and research. (HC-L)

6250 **Roemer, M.I.** *Disease picture in one developing country: El Salvador.* In Roemer, M.I., Health Care Systems in World Perspective, Ann Arbor, Mich., Health Administration Press, 1976, 23-31. Engl.
For complete document see entry 6010; originally published in Health Demonstration Area in El Salvador, Washington, D.C., Pan American Health Organization, Feb 1951, 48-73.

Mortality and morbidity data from a WHO survey of Quezaltepeque, El Salvador, are presented and discussed. The difficulties of collecting accurate data in a country where many births and deaths are not recorded are examined; ascertainable rates for infant mortality and general mortality were 127.3:1 000 and 19.9:1 000 respectively. The major diseases are malaria, tuberculosis, intestinal parasites, malnutrition, gastroenteritis, diarrhea, and respiratory infections, while a significant amount of morbidity is also attributed to cardiovascular diseases, accidents, venereal diseases, pertussis, dental caries, and problems of pregnancy and childbirth. (DP-E)

6251 **Rougemont, A., Boisson, M.E., Dompnier, J.P., Martaresche, B., Quilici, M.** *Paludisme et anémie de la grossesse en zone de savane africaines; étude épidémiologique, hématologique, biologique et immunologique dans deux villages de la région de Bamako, République du Mali. (Malaria and anaemia during pregnancy in the African savanna zone; epidemiological haematological, biological, parasitological, and immunological study in two rural villages in the Bamako region of Mali).* Bulletin de la Société de Pathologie Exotique et de ses Filiales (Paris), 70(3), 1977, 265-273. Fren. 24 refs.

A study of anaemia during pregnancy compared 25 pregnant women in two rural villages in Mali with 23 controls. It was observed that normochromic and regenerative anaemia usually appears during the 2nd trimester of pregnancy. Although the majority of the cases were normochromic, hypochromia was found in a few individuals with haemoglobin levels below 8 g:100 ml. This corresponded with slightly higher serum transferrin levels among the pregnant women. None of the 31 bone marrow samples examined showed megaloblastic changes. This study confirms the importance of malaria in the pathogenesis of anaemia during pregnancy in areas where malaria is endemic and stresses the need for chemotherapy. (Modified journal abstract)

6252 **Roy, R.G., Joy, C.T., Hussain, C.M., Ismail, K.M.** *Malaria in Lakshadweep islands (sic).* Indian Journal of Medical Research (New Delhi), 67(6), Jun 1978, 924-925. Engl.

After decades of freedom from malaria, the disease reappeared in Minicoy Island (India) and from July 1972-December 1975 870 cases were detected. Control measures such as residual indoor spraying with DDT and treatment of positive cases were successful and the disease disappeared in 1976. In the same year, however, it was extended to Bitra and Chetlet Islands, where 56 and 21 vivax cases were detected respectively. In Minicoy *A. tessellatus*, in Bitra *A.subpictus*, and in Chetlet either *A. Subpictus* or *A. varuna* or both were the suspected vectors. (Modified journal abstract)

6253 **Ruíz Gómez, J., Sánchez Burgos, Y.** *Análisis clínico y de laboratorio de los casos de sarampión observados durante la epidemia de 1976. (Clinical and laboratory analysis of measles cases observed during the 1976 epidemic).* Salud Pública de México (Mexico City), 19(5), Sep-Oct 1977, 645-650. Span. 9 refs.

An analysis of 133 complicated measles cases observed at the pediatric hospital of the *Centro Médico Nacional*, Mexico, is presented. Of particular interest is the fact that 34.6% of the cases had been immunized. Statistical data are included. (HC-L)

6254 **Sack, D.A., Eusof, A., Merson, M.H., Black, R.E., Chowdhury, A.M.** *Oral hydration in rotavirus diarrhoea: a double blind comparison of sucrose with glucose electrolyte solution.* Lancet (London), 5 Aug 1978, 280-283. Engl. 18 refs.

Of 57 Bangladeshi children aged 5-30 months with rotavirus diarrhea, 28 were given oral rehydration therapy with sucrose electrolyte solution and 29 were given glucose electrolyte solution in a randomized double-blind trial. These patients were compared with 44 children treated only with intravenous hydration. The two groups did not differ clinically in the rate of rehydration or the rate of purging. Vomiting did not interfere with the giving of oral therapy during hospital admission and defects of carbohydrate digestion do not prevent the use of a sugar electrolyte solution. Statistical data are included. (Modified journal abstract)

6255 **Saikawa, K.** *Report on leprosy survey in Okinawa; 4: leprosy in Kume Island.* Therapeutics (Tokyo), 31(11), 1977, 1294-1297. Japanese.

An epidemiological study carried out from 1938-1975 in Kume Island (Japan) indicated a drop in leprosy incidence during the last 5 years to 0.205%. A detailed analysis of the results showed interesting and hard to explain differences in leprosy incidence in the island's two villages; in Nakazato, incidence has decreased from 0.833%-0.074%, while in Gushikawa, the rate has increased from 0.085%-0.548% with a corresponding increase in the number of newly detected patients. Local leprosy screening programmes are described and statistical data included. (Modified journal abstract)

6256 **Santhanakrishnan, B.R., Ramachandran, A., Raju, B.** *Kala-azar in Madras City.* Indian Pediatrics (Calcutta, India), 14(6), Jun 1977, 471-473. Engl.

Kala azar (leishmaniasis), although a rare tropical disease, is still seen sporadically in Madras City, India. The case histories of 14 children treated for leishmaniasis from 1972-1976 are examined. Though the clinical pattern of the illness has not changed much, diagnostic difficulties are encountered in the presence of other associated infections or complications. The response to treatment with pentavalent antimony drug was excellent in all cases studied and drug resistance does not appear to be a feature of Indian kala azar. Statistical data are included. (DP-E)

6257 **Santos Hernández, C.M., Gómez Cabale, E.** *Encuesta de egresados de hogares de recuperación nutricional. (Survey of children discharged from nutritional rehabilitation centres).* Revista Cubana de Pediatría (Havana), 49, Jul 1977, 391-410. Span.

A review of medical records, parental interviews, and anthropometric measurements were used to study 239 children who had been discharged from nutrition rehabilitation centres throughout Cuba. Despite an average stay of 113.7 days, 60.3% of the children were found to be underweight at the time of the survey. This paper presents and analyzes the data obtained, including the age and sex characteristics of the children, the socioeconomic status of their parents, and the availability or lack of follow-up. The need for rigorous anthropometric, dietetic, and psychological standards and increased emphasis on education in these centres is emphasized. (HC-L)

6258 **Sehgal, V.N., Rege, V.L., Mascarenhas, M.F., Reys, M.** *Prevalence and pattern of leprosy in a school survey.* International Journal of Leprosy (Washington, D.C.), 45(4), 1977, 360-363. Engl. 13 refs.

The prevalence of leprosy in a school survey in Panaji, India, was found to be 5.3:1 000 students, with males predominating. The majority of patients had a simple lesion on exposed parts of the body showing the clinical characteristics of tuberculoid leprosy, while two had features of indeterminate leprosy and one of borderline tuberculoid leprosy. However, histopathologically, most patients were classified as having borderline tuberculoid or indeterminate leprosy. A disparity between the clinical and the histopathological diagnoses was evident. This observation emphasizes the importance of studying both the clinical and histopathological features when deciding the precise status of a patient in the leprosy spectrum. Statistical data are included. (Modified journal abstract)

6259 **Selvamani, R.** *Leprosy: recent trends in treatment.* Antiseptic (Madras, India), 74(8), Aug 1977, 475-477. Engl.

Continuing research has greatly changed traditional concepts about the chemotherapy of leprosy, which can now be effectivelly cured. This article briefly reviews the various drugs employed in leprosy treatment, including dosages, cost, side effects, effectiveness, advantages, and disadvantages. These drugs include dapsone, thiosemicarbazone, clofazimine (lamprene), rifampicin, INH and thiazetazone, streptomycin, thalidomide, corticosteroids, and multidose therapy. (DP-E)

6260 **Senthivelu, C.** *Prevalence of intestinal parasites; a study on patients reporting at the Government General Hospital, Madras.* Antiseptic (Madras, India), 74(10), Oct 1977, 605-611. Engl.

A survey of the results of laboratory analysis of fecal samples from 8 184 outpatients at the Government General Hospital in Madras, India, revealed the following prevalence rates for intestinal parasites: *Entamoeba histolytica*, 22.4%; *Giardia lambia*, 15.8%; *Ascaris lumbricoides*, 15.4%; hookworm, 2.9%; and *Trichuris trichiura* , 1.4%; etc., with multiple infections in 6.7% of the cases studied. The results are discussed and presented as statistical data. The need for preventive measures is stressed. (DP-E)

6261 **Shaffer, R., Najai, D., Kabuleeta, P.** *Environmental health among the Masai of southern Kenya: the effect of water supply changes.* Progress in Water Technology (Oxford, UK), 11(1/2), 1978, 45-48. Engl.

The effect of a piped water supply on the health and habits of the nomadic, pastoral Masai of Kenya was studied with reference to domestic utilization, child morbidity, and child growth. This paper briefly discusses the study findings and limitations and gives some background information on the traditional sanitary environment of the Masai. (HC-L)

6262 **Shah, P.M., Nair, S.S.** *Physical growth of infants on vegetable based infant food.* Indian Pediatrics (Calcutta, India), 15(2), Feb 1978, 133-141. Engl.

For 6 months, 40 Indian infants whose mothers suffered lactation failure were fed on a vegetable-based infant food that obtained 50% of its protein from milk and the other half from groundnuts. After the 1st month, the control group of 15 breast-fed infants showed significantly better growth rate and weight gain than the study group and significantly greater increase in arm circumference after 3 months. It is suggested that an infant food that provides more calories per protein content may promote better growth. Statistical data are included. (DP-E)

6263 **Shanmugham, C.A., Roy, R.G., Ganesan, A.V.** *Kala-azar in Tamil Nadu state during 1945-75—a retrospective and prospective study.* Indian Journal of Medical Research (New Delhi), 65(6), Jun 1977, 796-806. Engl.

A detailed study of kala azar cases admitted to the various medical institutions of Tamil Nadu state (India) from 1945-1975 revealed an incidence of 28 864, 43 472, and 13 078 cases in Madras City, Ramanathapuram, and Tirunelveli districts, respectively. In the latter years, there was a drastic reduction in the number of cases due to effective disease control measures. However, because of vector resistance and high refusal rates for DDT spray, more attention must be given to antilarval operations for the control of anopheline vectors. A plea is made for a special drive against kala azar regardless of the role of DDT in malaria control. Statistical data are included. (DP-E)

6264 **Shiffman, M.A., Schneider, R., Faigenblum, J.M., Helms, R., Turner, A.** *Field studies on water sanitation and health education in relation to health status in Central America.* Progress in Water Technology (Oxford, UK), 11(1-2), 1978, 143-150. Engl.

The complete study has been presented in a report to US AID in three volumes.

A study was undertaken in Guatemala to develop a methodology for measuring the relationship between water and health. One village was provided with unlimited household supplies of piped water and, later, complementary health education. For the next 3 years, morbidity in its population was monitored and compared to that of a control population. Also, tests were made to calculate the prevalence of malabsorption of nutrients and food wastage in the two populations. This paper briefly describes the study results and discusses the limitations of the methodology employed. Some implications for future studies are indicated. (HC-L)

6265 **Shrivastva, D.K., Thawarani, Y.P., Gupta, K.** *Health examination of primary school children at Gwalior—part 1: demography and clinical appraisal.* Indian Pediatrics (Calcutta, India), 15(6), Jun 1978, 489-497. Engl. 21 refs.

Anthropometric and biochemical measurements of 1 300 schoolchildren (mostly male) aged 5-15 years in Gwalior, India, of whom 700 attended a fee-paying convent school and 600 a free government school, revealed an incidence of 1st degree malnutrition of 74% and 53% and, of 2nd degree malnutrition, 20% and 36% respectively. Vitamin A deficiency was seen in 16% and 34%, vitamin B deficiency in 12% and 22%, and dental caries in 16% and 34% of the 1st and 2nd groups. Socioeconomic status was significantly higher among the convent students, although most students in both groups had 3-4 siblings. Statistical data are included. (DP-E)

6266 **Sibert, J.R., Jadhav, M., Inbaraj, S.G.** *Maternal and fetal nutrition in south India.* British Medical Journal (London), 10 Jun 1978, 1517-1518. Engl. 15 refs.

An Indian study of 150 mothers who paid for their health care and 172 poorer mothers who did not provides further evidesnce that maternal nutrition has an important effect on infant nutrition and birth weight. There were significant differences between the two groups in maternal triceps thickness, infant weight, and infant length, and a positive correlation between maternal triceps thickness and infant weight, length, and triceps and subscapular skinfold thickness. Statistical data are included. (DP-E)

6267 **Sigulem, D.M., Tudisco, E.S., Goldenberg, P., Athaide, M., Vaisman, E.** *Anemia ferropriva em crianças do município de São Paulo. (Iron deficiency anaemia in children from the city of São Paulo).* Revista de Saúde Pública (São Paulo, Brazil), 12(2), 1978, 168-178. Portuguese. 17 refs.

In São Paulo, Brazil, 278 children aged 6 months-5 years were screened for anaemia and the findings correlated with age, adequacy of diet, family income, etc. Almost 23% of the sample were found to be anaemic; most of these were aged less than 2 years, consumed a diet inadequate in iron, and were from low *per capita* income families. A regime of 7 mg ferrous sulfate per kg body weight per day for 1 month was found to be 100% effective in treating 15 of them. It is recommended that all children aged less than 2 years be routinely screened for anaemia and that ferrous sulfate be used in the prevention and treatment of the condition. Statistical data are included. (HC-L)

6268 **Sigulem, D.M., Osiro, K., Batista Filho, M., Norbrega, F.J. de** *Nomenclatura e classificação da desnutrição—2a parte; 2: padrões somatométricos da criança. (Malnutrition terminology and classification; part 2: growth standards for children).* Jornal de Pediatria (Rio de Janeiro, Brazil), 41(9-10), Sep-Oct 1976, 63-68. Portuguese. 21 refs.

Anthropometric measurements (height and weight) from 500 children aged 6-60 months from various socioeconomic backgrounds in São Paulo, Brazil, were classified according to the Harvard, the St. André, and the Gómez standards (the lst based on North American and the last two on Latin American averages). The children from the highest income bracket were found to exhibit averages equal or superior to the Harvard standard, lending support to the theory that lower growth averages among Brazilian children are due to socioeconomic rather than genetic factors. The danger of missing potential at-risk cases is therefore inherent in the use of the local standards, except for the weight averages of the St. André standard (social class IV). (HC-L)

6269 **Singh, A.P., Rizvi, S.N.** *Child growth and adult physique in male Bhoksas of Nainital (India).* Indian Journal of Pediatrics (Calcutta, India), 44(359). Dec 1977, 359-363. ENgl.

Anthropometric measurements were collected during a 1974 Indian study of 250 adult Bhoksa males and 180 children to provide baseline data for future research concerning this tribe. The measurements are presented as statistical data; they include growth of height, trunk, head, and body weight. (DP-E)

6270 **Sinniah, B., Sinniah, D., Singh, M., Poon, G.K.** *Prevalence of parasitic infections in Malaysian oil palm estate workers.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 9(2), Jun 1978, 272-276. Engl. 14 refs.

A survey of 150 workers and family members resident in an oil palm estate in Malaysia revealed a 97.7% incidence of parasitic infections. The most common parasites were *T. trichiura* (56%), *A. lumbricoides* (52%), hookworm (28%), *Entamoeba coli* (11.3%), and *Girardia lambia* (11.3%). Mixed infections by two or more parasites were seen in 46% of the subjects. Anaemia was present in 70% of the children with hookworm infection and eosinophilia in 69% of the sample. Statistical data are included. (DP-E)

6271 **Smith, D.H., Warren, K.S., Mahmoud, A.A.** *Morbidity in schistosomiasis mansoni in relation to intensity of infection: study of a community in Kisumu, Kenya.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 28(2), Mar 1979, 220-229. Engl. 20 refs.

A random household sample of 30% of the population of 1 393 Kenyan villages was examined in a cross-sectional study of the correlation of morbidity with the prevalence and intensity of schistosomiasis mansoni as determined by standard medical examination. *Schistosoma mansoni* infection, as determined by quantitative Kato thick smears, had an overall prevalence of 47% with a peak of 75% in those aged 40-49 years. With respect to intensity, 53% were uninfected, 26% had light (10-100 eggs:g), 15% moderate (101-400), and 6% severe (greater than 401) infections. Statistical data are included. (Modified journal abstract)

6272 **Solis B., J.M., Guzmán A., J., Tolentino R., F., Tolentino R., A.** *Programa de búsqueda, tratamiento y control de casos de tuberculosis, letrinización y educación para la salud. (Program of detection, treatment and control of tuberculosis, latrine construction, and health education).* Prensa Médica Mexicana (Mexico City), 44(9-10), Sep-Oct 1979, 196-200. Span.

From April-December 1979, a multidisciplinary team consisting of a physician, two auxiliary health workers, and one sanitation auxiliary undertook the following activities in 13 communities (population 7 555) in an isolated rural area of Hidalgo, Mexico: tuberculosis case-finding, treatment, and follow-up; BCG vaccina-

tion; latrine building (a diagram of the model is included); and health education. The results of the campaign, presented in this paper, were very encouraging and the adoption of this approach to tuberculosis control on a permanent basis is recommended. (HC-L)

6273 **Solón, F.S., Popkin, B.M., Fernández, T.L., Latham, M.C.** *Vitamin A deficiency in the Philippines: a study of xerophthalmia in Cebu.* American Journal of Clinical Nutrition (Bethesda, Md.), 31(2), Feb 1978, 360-368. Engl. 22 refs.

An investigation of xerophthalmia was undertaken in four ecological zones in Cebu, the Philippines. Clinical, anthropometric, biochemical, dietary, and socioeconomic data on 1 715 children aged 1-16 years were gathered and analyzed by means of multivariate statistical techniques for association with xerophthalmia. This paper discusses the results of the study, which are to be used as the basis for comparing the efficacy of three alternative strategies for the control of xerophthalmia. (HC-L)

6274 **Speake, J.D.** *Caries prevalence and restorative dental services in some Pacific islands.* Australian Dental Journal (Sydney), 25(4), Aug 1980, 193-196. Engl.

In a study conducted from 1975-1977 in six Pacific Island countries, the permanent teeth of 2 759 children (1 369 aged 8, 1 390 aged 11 years) were examined and classified as sound, decayed, indicated for extraction, missing, filled, or excluded. The differences between the results for the various countries are discussed and the factors that determine the results (particularly sugar consumption and the level of dental services) are considered. Attempts to improve the situation are also examined. Statistical data are included. (DP-E)

6275 **Sreenivasan, M.A., Banerjee, K., Pandya, P.G., Kotak, R.R., Pandya, P.M.** *Epidemiological investigations of an outbreak of infectious hepatitis in Ahmedabad City during 1975-76.* Indian Journal of Medical Research (New Delhi), 67(2), Feb 1978, 197-206. Engl. 20 refs.

During December 1975 and January 1976 in Ahmedabad, India, 934 cases of jaundice and 62 associated deaths were reported. Nearly 45% of the cases were young adults aged 16-20 years. Out of 25 women who died, 12 were either pregnant or in the puerperium or had aborted. Evidence was obtained of fecal contamination of drinking water in several parts of the city together with an aggregation of cases around contaminated water sources, suggesting a water-borne infection. The high incidence among children and relatives indicated additional transmission by person-to-person contact. Statistical data are included. (DP-E)

6276 **Srinivasan, N., Rajagopalan, S., Kanera, A.C., Gopaldas, T.** *Evaluation of the efficiency of the delivery of different levels of health and nutrition services to the young child.* Indian Pediatrics (Calcutta, India), 15(7), Jul 1978, 537-541 Engl.

As part of Project Posdhak, Madhya Pradesh, India, a study was undertaken to assess the efficiency and impact of four integrated packages of nutrition, health, and child care education services exhibiting various emphases, durations, and degrees of supervision. Efficiency was measured in terms of specially developed indices and impact was calculated in terms of the weight gain of its child participants. Children benefiting from all four of the packages demonstrated better aggregate growth rates than their control counterparts, with the degree of improvement directly related to the level of programme inputs. Details of the evaluation methodology and findings are presented. Statistical data are included. (HC-L)

6277 **Srivastava, A.K., Agarwal, V.K.** *Evaluation of some clinical characteristics in assessing the maturity of newborns.* Indian Journal of Pediatrics (Calcutta, India), 45(361), Feb 1978, 41-47. Engl. 12 refs.

The validity of some physical and neurological criteria of gestational maturity was assessed in 600 Indian infants. Of 26 criteria, only 8 were well correlated with gestational age: sole creases, ear cartilage, heel to ear manoeuvre, breast tissue, scarf manoeuvre, crossed extension, skin texture, and grasp reflex. The maturity score for small-for-gestation infants was significantly higher than that of preterm infants but not significantly different from that of normal term infants. Statistical data are included. (DP-E)

6278 **Stephenson, L.S., Crompton, D.W., Latham, M.C., Schulpen, T.W., Nesheim, M.C.** *Relationships between ascaris infection and growth of malnourished preschool children in Kenya.* American Journal of Clinical Nutrition (Bethesda, Md.), 33(5), May 1980, 1165-1172. Engl. 33 refs.

In order to determine the relationship between ascaris infection and the growth of preschool children, 186 children (61 infected, 125 controls) from two villages in the Machakos District (Kenya) underwent anthropometric, clinical, and stool examinations 3 times at 14 week intervals, receiving the anthelminthic drug levamisole at the 2nd examination. The results are discussed and presented as statistical data. The findings indicate that ascaris infection does contribute to protein-energy malnutrition in young children in developing countries; it is suggested that ascariasis deserves a higher priority in nutrition intervention programmes than it is now receiving. (DP-E)

6279 **Steveny, J.** *Enquête nutritionnelle dans le district de Koza (Nord-Cameroun); apprèciation de l'état nutritionnel des enfants et évalua-*

tion d'une action de protection infantile. (Nutritional enquiry in Koza district (North Cameroon): an assessment of child nutrition status and an evaluation of a child health service). Courrier (Paris), 28(4), 1978, 345-349. Fren.

Arm circumference was used as a nutritional indicator in a study of 3 746 children in Koza District, Cameroon. Despite the availability of food deemed sufficient in quantity and quality, 34.3% of children aged 1-2 years and 24.8% of those aged 2-3 years were found to be affected with moderate to severe malnutrition. Prevalence was higher among girls than boys and among Moslems than animists. A 2nd study was conducted 1 year later in a village with a newly-established maternal child health service and a control village; a marked reduction in the incidence of malnutrition was evident in the former. The results of an inquiry into child mortality, apparently 50% in the district, are annexed. Statistical data are included. (HC-L)

6280 **Suharjono, Adnan, S.W., Sutejo, R.** *Rehydration centre (R.C.) in the OPD, Department of Child Health, University of Indonesia, during a short cholera outbreak.* Paediatrica Indonesiana (Jakarta), 17(7/8), Aug 1977, 218-222. Engl. 16 refs.

During a 1976 outbreak of cholera in Jakarta (Indonesia), there were no deaths among 95 children treated at a rehydration centre with a regimen that combined the intravenous administration of Ringer's lactate simultaneously with an oral glucose electrolyte solution. Parent education was also an important part of the programme. The rapid establishment of the rehydration centre and a seminar on rehydration in Indonesia 2 years previously both contributed to the programme's success. (DP-E)

6281 **Tabet-Derraz, O., Belkaid, M., Naceur, D., Ouchfoun, A.** *Nouveau foyer de bilharziose urinaire en Algérie. (New focus of urinary schistosomiasis in Algeria).* Bulletin de la Société de Pathologie Exotique et de ses Filiales (Paris), 70(3), 1977, 224-227. Fren. 8 refs.

The authors present the results of a 1976 study that revealed 161 new cases of urinary bilharziasis in the suburb of El Harrach, Algeria, an area which had previously been free of the disease. They suggest that the parasites spread from nearby Khemis El Khechna or from other endemic areas and emphasize the danger of further spreading the disease. Statistical data are included. (FM)

6282 **Taha, S.A.** *Normal foetal growth in the Sudan.* Journal of Tropical Pediatrics and Environmental Child Health (London), 24(5), Oct 1978, 226-229. Engl. 18 refs.

This study of 635 Sudanese infants aimed at providing anthropometric standards for single, live-born children at gestational ages 36-42 weeks in order to identify those in need of special management. Comparison with a Caucasian series has shown only minor differences with respect to birth weight and height. It is suggested that, in view of the varying socioeconomic differences that exist between and within countries, there is no need for standards to be established for the Sudan. Until appropriate statistics are available for reference in different regions, the Omdurman standards can be adopted as representative of the country. Statistical data are included. (DP-E)

6283 **Tiendrebeogo, H., Ezani, K.E., Delormas, P., Coulibaly, N., Fillastre, C.** *Essai de vaccination B.C.G. à l'aiguille bifurquée chez le nouveau-né. (Trial of BCG vaccination of the newborn by bifurcated needle).* Médecine d'Afrique Noire (Paris), 25(4), Apr 1978, 239-243. Fren. 8 refs.

A trial conducted in 1976 in Abidjan, Ivory Coast, compared the effectiveness of BCG vaccination by intracutaneous injection and by the bifurcated needle and also of simultaneous BCG and smallpox vaccination. Results proved the superiority of BCG vaccination by 10 punctures. Simultaneous BCG and smallpox vaccination resulted in a lowering of tuberculin sensitivity. BCG vaccination by intracutaneous injection was clearly more effective than by the bifurcated needle. There was no significant difference in the results produced by the different vaccinators when using the bifurcated needle with 10 punctures, but there was a difference with 5 punctures and when the vaccine was given by injection. Statistical data are included. (Modified journal abstract)

6284 **Urrusti-Sanz, J., Yoshida-Ando, P., Frenk, S., Velasco-Candano, L., Rosado, A.** *Crecimiento posnatal del niño con desnutrición intrauterina/Post-natal growth of the child born with intra-uterine malnutrition.* Archivos de Investigación Médica (Mexico City), 9, 1978, 439-446. Engl., Span. 17 refs.

In a Mexican study, the clinical characteristics of 33 newborns—10 "intrauterine malnourished," 14 "premature," and 9 normal—were monitored up to age 2 years. The malnourished and premature infants grew faster than the normal ones, reaching a similar height, weight, and cephalic perimeter by age 12 months; at age 24 months, however, the premature infants had fallen behind in terms of height. Indications of abnormal psychomotor development in the intrauterine malnourished group merit further investigation. Statistical data are included. (HC-L)

6285 **Uzodike, V.O., Anidi, A.I., Ekpechi, L.V.** *Patterns of heart disease in Enugu, Nigeria.* Nigerian Medical Journal (Lagos), 7(3), Jul 1977, 315-319. Engl. 11 refs.

The analysis of 348 cardiac patients in Enugu, Nigeria, based on a combination of clinical, radiological, electrocardiographic, and autopsy findings over a 4-year period, is presented. Rheumatic heart disease (27.58%) and cardiomyopathy (25.8%) were found to be the commonest cause of heart disease. This article

also discusses the epidemiology of endomyalcardial fibrosis, hypertensive heart disease, cor pulmonale, ischaemic heart disease, and miscellaneous conditions. (DP-E)

6286 **Valenzuela, C.Y., González R., M., Aguilo, C.** *Mortalidad infantil en un hospital pediátrico. (Infant mortality in a pediatric hospital).* Revista Chilena de Pediatría (Santiago), 47(4), Jul-Aug 1976, 336-345. Span.

The results of a 1972-1973 survey of infant mortality in the children's hospital Roberto del Río, Santiago, Chile are presented and compared with similar data from a 1968-1970 study of infant mortality in the northern area of Santiago. The most striking results of the two studies were the weight of perinatal mortality in overall infant mortality, the predominance of males, and the different structure of infant mortality between intrahospital and general populations. Seven tables of data and a simple information system that was used in gathering the data for the 2nd study are presented. (HC-L)

6287 **van Steenbergen, W.M., Kusin, J.A., Voorhoeve, A.M., Jansen, A.A.** *Machakos Project studies: agents affecting health of mother and child in a rural area of Kenya; IX: food intake, feeding habits and nutritional state of the Akamba infant and toddler.* Tropical and Geographical Medicine (Haarlem, Netherlands), 30(4), Dec 1978, 505-522. Engl. Refs.

This study in Machakos District, Kenya, includes a precise assessment of the diets of infants and toddlers aged less than 3 years. The intake of breast milk and additional foods was determined by weighing each of 183 children during 4 consecutive days. The results are discussed and presented as statistical data. It is suggested that better growth during infancy can be achieved within the area's economic possibilities by feeding porridge of high caloric density, i.e., more flour, fat, and sugar, and by earlier introduction of solid traditional foods. (DP-E)

6288 **Venkataswamy, G., Cobby, M., Pirie, A.** *Rehabilitation of xerophthalmic children; a follow-up study in southern India.* Tropical and Geographical Medicine (Haarlem, Netherlands), 31(1), Mar 1979, 149-154. Engl.

Of 275 children admitted to the Madurai (India) nutrition rehabilitation centre in 1975, all were malnourished and 213 had xerophthalmia. A follow-up study that traced 55% of these children revealed that all existing cases of corneal xerosis had healed but conjunctival xerosis remained in some. Major corneal damage through ulceration, keratomalacia, and scars were present in 34 of the 94 children originally admitted for these conditions. Four were blind and five had severely limited vision in both eyes, but useful vision was present in one or both eyes of the other 25 (73%) children. The mortality among xerophthalmic children while at the centre was 6.6% compared to 20% among those visited later at home. Almost all mothers questioned said they gave their children green vegetables, but few other dietary suggestions were followed. (Modified journal abstract)

6289 **Viseshakul, D., Premwatana, P., Kewsiri, D.** *Nutritional status of hill-tribe children and their lactating mothers.* Medical Association of Thailand (Bangkok), 61(1), Jan 1978, 26-32. Engl.

A 1976 anthropometric study of 149 preschool children and 64 lactating women from an immigrant hill tribe population in nothern Thailand revealed that child development until the age of 1 year (at which time the child was weaned) was satisfactory but that half the children aged 2-4 years were malnourished. Lactating women were generally malnourished due to inadequate food intake combined with high fertility leading to continuous lactation. Infant mortality was high, with half the neonates dying of sepsis or tetanus. It is recommended that low-cost infant foods be developed and maternal nutrition improved in order to prolong the nursing period. Detailed results of the study are presented as statistical data. (DP-E)

6290 **Viseshakul, D.** *Breast feeding practice of the hilside people of Thailand and its effect on the growth of their offspring.* Journal of Human Nutrition (London), 31(3), 1977, 189-193. Engl. 8 refs.

The growth and feeding patterns of infants aged up to 2 years were studied in 149 children of Thai hill tribes and 121 children from poor families in Bangkok. The hill tribe children have a faster rate of growth up to age 18 months than the urban children, but at age 2 years both groups weigh the same, about 75% of the Harvard standard. The hill tribe infants were completely breast-fed until the age of 1 year and after that received breast milk plus rice and other food. The urban children were more likely to be bottle-fed. Statistical data are included. (Modified journal abstract)

6291 **Wakhlu, I., Narayan, V., Singh, J.V.** *Socio-clinical study of leprosy amongst children.* Indian Journal of Pediatrics (Calcutta, India), 44(359), Dec 1977, 369-374. Engl.

A study was conducted of 43 Indian leprosy patients aged less than 15 years to determine the impact of various factors upon the disease in this age group. Information collected on demographic and cultural characteristics, social class, possible aetiology of the infection, diagnosis, treatment, and attitudes towards the disease is discussed and presented as statistical data. (DP-E)

6292 **Waterlow, J.C.** *Observations on the assessment of protein-energy malnutrition with special reference to stunting.* Courrier (Paris), 28(5), 1978, 455-460. Engl. 26 refs.

The author discusses the classification of protein-energy malnutrition with reference to wasting (low weight for height) and stunting (low height for age). He maintains that, since the pattern of malnutrition is clearly established by the time the child is 2 years of age, preventive measures should be concentrated on young children and on pregnant and lactating women. If the child survives for 2 years, he is probably approaching normal weight for height but still has a deficit in height. Because stunting is associated with impairment of mental development, it is important to investigate its cause and why some children become stunted and others do not. Statistical data are included. (DP-E)

6293 **Watson, A.R.** *Breast versus bottle feeding.* South African Medical Journal (Capetown), 53(4), 28 Jan 1978, 118. Engl.

A survey of 354 black South African mothers in a Durban outpatient department revealed that, while 58% of children aged less than 1 month were breast-fed, the number had dropped to 11% by age 4 months. Only 7% of these women went out to work. The popularity of bottle-feeding is attributed to advertising, especially by radio, despite the fact that artificial feeds are expensive for poor communities and instructions for their use are in foreign languages. Advertisements should be discouraged in a population where obesity is equated with health. (DP-E)

6294 **Watten, R.H., van Peenen, P.F., Joseph, S.W., Loubenapessy, A., Cross, J.H.** *Biomedical survey in the Moluccas, Indonesia.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 9(1), Mar 1978, 20-24. Engl. 8 refs.

In 1971, a survey was conducted in Indonesia to determine the incidence of intestinal and blood parasites and of antibodies to certain infectious diseases. An examination of 124 stool specimens, mostly from schoolchildren aged 13-17 years, revealed these prevalence rates of the three major diseases: *Trichuris trichiura*, 95%; hookworm, 87%; and *Ascaris lumbricoides*, 80%. *Plasmodium vivax* was found in 4 of 216 blood smears collected in the daytime; no microfilaria were found. In tests of 131 sera samples, positive titres were found to *Entamoeba histolytica* (24%), *Taxoplasma gondii* (13%), encephalitis (76%), and various types of influenza. (DP-E)

6295 **Weekly Epidemiological Record, Geneva.** *Poliomyelitis surveillance/Surveillance de la poliomyélite.* Weekly Epidemiological Record (Geneva), 53(32), 11 Aug 1978, 237-238. Engl., Fren.

Brazil's newly-implemented poliomyelitis surveillance system reported 3 433 cases in 1975 and 2 578 in 1976, a considerable increase over previous years. Of these cases, 90% occurred in urban children aged less than 5 years (80% aged 6 months-2 years), of whom 80% had not been vaccinated. The average mortality reported was 16.7%. Of 1 643 cases, 40% were confirmed in the laboratory and, of 960 virus identifications, 94% were poliovirus type 1 in 1975 and 87% in 1976. In 30 suspected poliomyelitis cases, an enterovirus other than poliovirus was identified. (Modified journal abstract)

6296 **Weekly Epidemiological Record, Geneva.** *Tuberculosis surveillance/Surveillance de la tuberculose.* Weekly Epidemiological Record (Geneva), 53(14), 7 Apr 1978, 101-102. Engl., Fren.

In 1976, the number of notifications for tuberculosis in Singapore was 2 813 (124:1 000), a decrease of 10.9% from 1975. Respiratory disease accounted for 95.4% of the new cases. Males predominated in the respiratory series (73.4%) and females in the non-respiratory series (58.9%). The tuberculosis mortality was 15.7:1 000 000, a decrease of 14.8% from 1975, of which 95% occurred in patients aged more than 40 years. Since 1967, 90% of neonates have received BCG vaccinations and there is a vaccination programme for elementary schoolchildren. The total number of patients on the tuberculosis register at the end of 1976 was 57 355, including those with active and inactive disease. (DP-E)

6297 **Weissenberger, R., Robertson, A., Holland, S., Hall, W.** *Incidence of gonorrhoea in urban Rhodesian black women.* South African Medical Journal (Capetown), 52(28), 31 Dec 1977, 1119-1120. Engl.

Pelvic inflammatory disease, thought to be brought on by gonorrhoea, accounts for 44% of admissions to the gynaecological ward in Harari Hospital, Salisbury, South Africa. The screening of 268 patients attending antenatal, gynaecology, and family planning clinics revealed the overall incidence of gonorrhoea to be 9.7%. In the light of this finding, it is suggested that the screening and treating of as many patients as possible would be a cost-effective alternative to hospitalization for pelvic inflammatory disease. (HC-L)

6298 **Wenlock, R.W.** *Birth spacing and prolonged lactation in rural Zambia.* Journal of Biosocial Science (London), 9(4), Apr 1977, 481-485. Engl. Refs.

Data were collected from 1 044 rural Zambian mothers during a national nutrition survey to determine the effect of lactation on the interval between conceptions. Lactation is prolonged, with some mothers breast-feeding up to 33 months. A main reason for cessation of breast-feeding appears to be a new pregnancy, only 1.5% of mothers being neither pregnant nor lactating up to 12 months. During lactation, conception is delayed for at least 12 months. The peak in new conceptions occurs from 25-27 months. The normal interval between births is 3 years. Statistical data are included. (Modified journal abstract)

6299 **Wyatt, R.G., Yolken, R.H., Urrutia, J.J., Mata, L., Greenberg, H.B.** *Diarrhea associated with rotavirus in rural Guatemala: a longitudinal study of 24 infants and young children.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 28(2), Mar 1979, 325-328. Engl. 14 refs.

A population of 24 Guatemalan infants and young children followed prospectively during the 1st 3 years of life was studied for the occurence of rotavirus infection by using enzyme-linked immunosorbent assay to detect virus in stools. Infection with rotavirus was associated with 26 (14.2%) of 183 selected diarrhea episodes. Twenty of the 24 children had diarrhea associated with rotavirus on at least one occasion and six had two such episodes. Rotavirus infection was documented in over 50% of the dehydrating episodes studied, thus further indicating the importance of rotavirus in this population. (Modified journal abstract)

6300 **Yazov, L., Petros, W.G., Stump, E.** *Epidemiological studies on rheumatic heart disease and streptococcal carriers among school-children in Addis-Ababa, Ethiopia; preliminary communication.* Zeitschrift für Rheumatologie (Darmstadt, Germany), 37(9-10), Sep-Oct 1978, 304-308. Engl. 19 refs.

Epidemiological follow-up studies of 1 012 schoolchildren aged 6-20 years in Addis Ababa, Ethiopia, revealed a relatively low morbidity from rheumatic heart disease (0.49%) and a small percentage of carriers of A-B-haemolytic streptococci (4.24%) were found. There was no statistically significant difference between the well-to-do and lower socioeconomic groups. The serological types of streptococci found are also discussed. (DP-E)

Author Index

(figures refer to abstract numbers)

A

Abasiekong, E.M., 6042
Abdel-Wahab, M.F., 6073
Abdou, I.A., 6180
Abdussalam, M., 5697
Abreu, A., 5809
Acciarri, G., 6074, 6075
ACTION, Peace Corps, Washington, D.C., 5938, 5939
Acuda, S.W., 5720
Acuña, H.R., 5721
Addy, P.A., 5722
Adekolu-John, E.O., 6023
Ademuwagun, Z.A., 6043
Adeokun, L.A., 5987
Adesugba, J.A., 5801
Adetosoye, A.I., 6076
Adetuyibi, A., 6077
Adé, E., 6078
Adkins, B.L., 6068
Adnan, S.W., 6280
African Medical and Research Foundation, Nairobi., 5940
Agadzi, V.K., 6079, 6080
Agarwal, A.K., 6081
Agarwal, S., 6131
Agarwal, S.K., 6119
Agarwal, V.K., 6277
Agbakwu, S.N., 5801
Aghajanian, A., 6044
Aguilo, C., 6286
Ahearn, F., 6082
Ajamee, G., 6085
Ajao, A.O., 5723
Ajao, O.G., 5723, 5817
Akinkugbe, F.M., 6083
Akinla, O., 5818
Akisany, J.B., 6077
Akpabio, M.A., 6128
Al-Ani, H.A., 6040
Al-Dubooni, H.M., 6212
Alberman, E., 5658
Albert, K., 6245
Aldighieri, R., 5724
Alhady, S.M., 5698
Allen, C.M., 6130
Alleyne, G.A., 5941
Almeida Neto, J.C., 6232
Almroth, S.G., 6084
American Council of Voluntary Agencies for Foreign Service, Inc., New York., 5601
Ames, S., 5851
Amidi, S., 6085
Amstey, M.S., 5942
Anand, K., 6099
Angiulo, S., 5879
Anidi, A.I., 6285
Apgar, D.A., 5983
Arango, A., 5931
Araujo Oliveira, J. de, 5994
Arbona, G., 5988
Arcoverde de Freitas, C., 6086
Areekul, S., 6087
Arias, J., 5984
Armenian, H.K., 5989
Armijo, R., 6088
Armon, P.J., 5819
Armstrong, P., 5992
Arora, R.R., 6089
Arroyave, G., 6090
Asali, A.R., 6091
Ashcroft, M.T., 6092
Assimadi, K., 6093
Association of Surgeons of East Africa, Lusaka., 5820
Asuni, T., 5709
Athaide, M., 6267
Avery, J.G., 6094
Ayanru, J.O., 5861
Ayeni, O., 6225
Aymard, M., 6111
Ayoade, J.A., 6043
Ayrado, A., 5809
Azevedo, A.C. de, 5990
Azubuike, J.C., 6095

B

Babar, S.N., 6131
Backheuser, M.P., 5863
Bahreini, B., 6096
Bahreini, F., 6096
Bahreini, M., 6096
Bailey, R., 6194
Bailey, W.S., 5725, 6097
Baker, P.T., 6171
Baker, R.D., 6098
Baker, S.J., 5726
Baker, S.S., 6098
Balakrishnan, S., 6235

Balint, O., 6099
Ballard, R.C., 5855
Bamisaiye, A., 5864
Bandaranayake, R.C., 5972
Banerjee, G., 6214
Banerjee, J.K., 5832
Banerjee, K., 6275
Banerjee, N., 5659
Bang, F.B., 5727
Bannerman, R.H., 5614
Barcía Manzanedo, H., 6045
Barmes, D.E., 6068, 6100
Baron, H., 5970
Barr, G.D., 6130
Barth, L., 5865
Barthel, E., 6101
Baruzzi, R.G., 6138
Bashshur, R., 5991, 5992
Bassett, W.H., 5946
Basu, R.N., 5993
Bates, D.G., 5895
Bathirunathan, N., 6121
Batista Filho, M., 6268
Baylet, R., 6102, 6103, 6104, 6105, 6106, 6215
Becerra Troya, M., 5929
Behar, M., 5728, 5729, 5730
Belavady, B., 5731
Belcher, D.W., 6072
Belizán, J.M., 5894
Belkaid, M., 6281
Beltrán H., F., 6223
Beltrán R., O., 5975
Bennett, F.J., 5660
Berkeley, J.S., 5821
Berry Brazelton, T., 6107
Berthet, E., 5732
Bertin, C., 6233
Bertrand, J.T., 5866
Bertrand, W.E., 5866, 5973
Bewes, P.C., 5883
Bégué, P., 6093
Bhandari, A., 6201
Bhargava, I., 6235
Bickerton, J., 6046
Bing, J., 5822
Binns, C.W., 6108
Black, R.E., 6254
Blackmon, D., 5699
Boersma, E.R., 6200
Boffey, P.M., 5626
Boisson, M.E., 6251
Bollag, U., 5884, 5885
Boral, G.C., 6214
Bordes, A., 5833
Borgoño, J.M., 6109, 6110
Bossert, T., 5661
Bradley, P.A., 5834
Brander, G.C., 5733
Braun, R.C., 5823
Brava, L.L., 5789
Breman, J.G., 6190
Breslau, N., 5974
Bridgers, W.F., 5867
Brigaud, M., 6111
Briggs, R.M., 5918
Brink, E.W., 6112
Brogan, L., 6067
Brooke, D., 5862
Brooke, S.P., 6112
Brown, E.M., 5932
Brown, T., 6113
Browne, S.G., 5627
Buie, C., 5710, 5868
Bulletin of the International Union against Tuberculosis, Paris., 5943
Burgess, P., 6116
Burney, M.I., 5734
Burrett, B.A., 5835
Burton, J., 5614
Butte, N., 5650
Butz, W.P., 5662

C

Cabarrus P., J.F., 5930
Caldwell, H.R., 6017
Caldwell, J.C., 6047
Caldwell, P., 6047
Calloway, D.H., 6052, 6163
Camargo, S., 6232
Camazine, S.M., 6048
Carlier, A., 5944
Carpenter, T.O., 5824
Carrada Bravo, T., 6114
Carrie, J., 6142
Carson, B., 5826
Carstairs, G.M., 5711
Carvajal, L., 6115
Carvajal, M., 6116
Carvalho de Noronha, J., 5994
Casabal, G., 6198
Casal Sosa, A., 5849
Casanueva, E., 5869
Cassel, J., 5933
Castelazo-Ayala, L., 5735
Castellanos, I., 5628
Castillo, C., 6203
Centre d'Information sur la Régulation des Naissances, la Maternité et la Vie Sexuelle, Paris., 5945
Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Paris., 5602
Centre National de la Recherche Scientifique, Paris., 5736
Cerqueira, M.T., 5869
Chacón, E., 5975
Chakraborty, A.K., 6117
Chand, M., 5737
Chandra, P., 6118
Chantachum, Y., 6087
Charles, E.D., 5867
Charlton, G., 6068
Chatterjee, A., 6119
Chaturvedi, S.K., 5886
Chaurasia, A.R., 6120

Chávez, A., 5869
Cheng, M.C., 6049
Cheong, J., 6049
Cheradame, R., 5933
Chhuttani, P.N., 5674
Chinchilla Aguilar, O., 5962
Chintu, C., 6121
Chippaux, A., 5749
Chiron, J.P., 6122
Chishty, S.M., 5738
Cho, L.J., 6008
Choe, M.K., 6227
Chomel, J.J., 6111
Choudhry, A.W., 5739
Choudhury, D.S., 6089
Chowdhury, A.K., 6123
Chowdhury, A.M., 6254
Christiansen, N., 6206
Christie, D., 5675
Chye, T.C., 5919
Clancy, R., 5740
Clarke, W.D., 5870
Clayden, A.D., 6124
Clement, J., 6206
Cobby, M., 6288
Coffi, E., 5741
Cohen, N., 6124
Colditz, G.A., 5896
Cole, J., 6140
Colle, R.D., 5663
Collins, S.M., 5604
Combes, C., 6246
Cook, G.C., 5897
Cooper, E., 6125, 6126
Cooper, E.S., 5995
Cordellier, R., 5749
Corey, G., 6109, 6110
Cornet, M., 5749
Costa, M., 5909
Cottingham, J., 6127
Coulibaly, N., 6283
Coulter, J.B., 6128
Couture, A., 5833
Cova Rey, R., 5931
Coward, W.A., 6129
Crompton, D.W., 6278
Cross, J.H., 6179, 6294
Curlin, G.T., 6123
Curtin, L.L., 5920

D

Dallman, P.R., 6130
Damodar, 5977
Danaher, K., 5657
Daniel, S.O., 5996
Darbari, B.S., 6131
Das, A., 6089
Dave, A.D., 6178
Dave, S.K., 6178
Davey, S.C., 6024
Davidson, R.N., 5629
Davies, F.G., 5946
Davies, J.E., 6172
Davis Kelly, E., 5947
Dayal, R.S., 6132
de Glanville, H., 5609
de la Loza Saldivar, A., 6133
de Mercado, R., 6074, 6075
de Rouen, T., 6204
de Sole, G., 6134
de Sweemer, C., 5664
Decamps, H., 6246
Deisher, R.D., 5918
DeLay, E.A., 6002
Delgado, H., 5894, 6193
Delormas, P., 6283
DeMaeyer, E.M., 5742
Denis, F., 6122
Deschamps, J.P., 5898
Desole, G., 6185
Devadas, R.P., 6135, 6136, 6137
Development Communication Report, Washington, D.C., 5836
Devi, S., 5921
Devine, M., 5870
Dias, L.C., 6138
Diebolt, G., 6102, 6103
Ding, L.K., 6009
Diop Mar, I., 6122
Diop, E.M., 6139
Diop, L., 6139
Diop, S., 6102, 6103, 6104
Dirección Sectorial de Salud del Poder Popular, Havana., 5630
Dogramaci, I., 5743
Domínguez, I., 6234
Dompnier, J.P., 6251
Donald, P.R., 5747
Donato Rodrigues, R., 5994
Dowd, K., 5772
Doyle, P., 6140
Ducros, A., 6141
Ducros, J., 6141
Duncan, C., 5909
Dunlop, D.W., 6017
Duong, T., 5984
Durand, B., 6142, 6174
Durnin, J.V., 6154
Durodola, J.I., 5712
Dutra, M., 5909
Dutt, P.R., 5665
Dutta, G.P., 5666
Dutta, J.K., 6143
Dwyer, J.T., 5772

E

E.-Sahly, A., 6073
East African and British Medical Research Council., 6144
Ebong, W.W., 5825
Eckroad, J.C., 6074, 6075
Edungbola, L.D., 6145

Ekpechi, L.V., 6285
El-Kady, N., 6073
el-Lozy, M., 6146
El-Nofely, A.A., 6147
Elis, P.R., 5733
Elliot, V., 5667
Elliott, C.J., 5896
Elliott, K., 5603
Ellis, C.G., 5997
Erinosho, U.A., 6050
European Society for Paediatric Gastroenterology, Committee on Nutrition, Stockholm., 5744
Eusof, A., 6254
Evans, J., 6129
Evans, T.N., 5778
Evans, W., 5914
Ewing, D.C., 5983
Ezani, K.E., 6283

F

Faigenblum, J.M., 6264
Fairbanks, L.L., 5983
Fairbrother, P., 5826
Fajardo, L.F., 6074, 6075
Fajembola, A., 5818
Fall, M., 6148
FAO, Rome., 5745, 6149, 6150
Farid, H., 6151
Feachem, R.G., 6152
Federación Panamericana de Asociaciones de Facultades de Medicina, Caracas., 5899
Fehrsen, G.S., 5871
Fekete, E., 6153
Feldman, J.J., 6053, 6067
Ferguson, N.N., 5704
Fernándes da Motta, E.G., 5998
Fernández, F., 5809
Fernández, T., 6115
Fernández, T.L., 6273
Ferrer, A.M., 5869
Ferro-Luzzi, A., 6154
Filastre, C., 6155
Fillastre, C., 6283
Finch, C.A., 5746
Fisher, S.A., 5747
FitzPatrick, M.S., 5668
Flood, T., 6186
Florentino, C.A., 5837
Flores González, M., 6156
Floter, W., 6157
Fondu, P., 6158
Fontanot, G., 5869
Forichon, E., 5838
Fortin, J., 6159
Fouda Onana, A., 6247
Frament, 6104, 6105
Franks, J.A., 5748
Freedman, R.L., 6160
Frenk, S., 6284
Friedman, I.B., 5948
Friedman, R.L., 6164
Friedmann, P.S., 6161
Frost, O., 5900
Fulgencio, L., 6198
Fülöp, T., 5610, 5904

G

Gaitán, E., 6204
Galbraith, J.E., 5949
Gambhir, S.K., 5985, 6201
Gandhi, H.S., 6029
Ganesan, A.V., 6263
Gardiner, A.J., 6162
Garilao, J., 5850
Gautam, A.P., 6143
Gálvez-Tan, J., 5631
Geber, M., 6051
Geissler, C., 6052, 6163
Gelfand, H.M., 5632
Genest, S., 5713
Gereda, R., 5930
Germain, M., 5749
Gesler, W.M., 5999
Gharehjeh, A.M., 6085
Ghosh, A., 6214
Ghoshal, B.C., 5915
Gibson, C.L., 6097
Gilchrist, D.S., 5862
Giles, G.G., 6024
Gilles, H.M., 5750, 6181
Gilmore, A., 6033
Gish, O., 6000
Goel, M.K., 6081
Goel, R.K., 6178
Goic, A., 5617
Goldenberg, P., 6267
Goldsmid, J.M., 6189
Goldsmith, J.R., 5933
González R., M., 6286
Goodson, L., 5867
Gopaldas, T., 6276
Gotsick, P.S., 6164
Gould, G., 5839
Gómez Cabale, E., 6257
Gracey, M., 6165
Grassi, J., 6166
Green, G.M., 5827
Green, L.W., 6065
Greenberg, H.B., 6299
Greene, S.B., 6053, 6067
Greenwood, J.G., 6034
Gridel, F., 5767
Griffiths, M., 5872
Grivetti, L.E., 6167
Grosshans, E., 6233
Gudani, L., 6198
Gueri, M., 6168
Guha, P.K., 5633
Gujral, V.V., 6089
Gunaratne, V.T., 5669
Gupta, K., 6265
Gupta, K.B., 5985

Gupta, M., 6169
Gupta, M.C., 6170
Gupta, P.S., 6197
Guyer, B., 6001
Guzmán A., J., 6272

H

Haas, J.D., 6171
Habicht, J.P., 5634, 5662
Haddad, J., 5984
Haddock, K.C., 5751
Hakim, P., 6021
Halbertstein, R.A., 6172
Hall, W., 6297
Ham, J.M., 5933
Han, S.H., 6227
Hargreaves, W.A., 6002
Hariga-Muller, C., 6158
Harper, J.M., 6176
Harrap, B.S., 5604
Harrington, J.J., 5933
Harris, J.R., 5795
Harrison, I.R., 6043
Hartman, A.F., 6173
Hartwig, C.W., 5635
Haupt, A., 5950
Hay, R.W., 5941
Headden, G., 6125
Hearn, C.R., 5611
Hein, H.A., 5704
Helms, R., 6264
Henderson, J.O., 5604
Henderson, R.H., 5752
Hesperian Foundation, Palo Alto, Cal., 5840
Heymann, D.L., 6174
Hibler, M., 5828
Hidalgo San Martín, A., 5901
Hight, P.L., 5842
Hijazi, S.S., 6175
Hill, R.F., 6034
Hinds, V., 6168
Hoekenga, M.T., 6097
Hoffman, D.B., 5753
Hofvander, Y., 5754
Holland, S., 6297
Holland, W.W., 5670
Hookey, P., 5976
Hornabrook, R.W., 6054
Hounkpe, Y., 6215
Huckstep, R.L., 5951
Huff, N.R., 6112
Huffman, S.L., 6123
Hughes, C.C., 5671
Hunponu-Wusu, O.O., 5801
Hunt, E.E., 6171
Hussain, C.M., 6252

I

Ike Izuora, G., 6095
Inbaraj, S.G., 6266
Inciong, M.B., 6222
International Association of Agricultural Medicine, Paris., 5636
International Confederation of Midwives, London., 5926
International Federation of Gynaecology and Obstetrics, London., 5926
Ipsen, J., 5670
Isala, E., 6234
Isely, R.B., 5887
Ismail, K.M., 6252

J

Jadhav, M., 6266
Jain, A., 6169
Jain, B.K., 6197
Jain, D.K., 6056
Jain, T.P., 5977
Jalan, K.N., 6119
Jalayer, T., 6151
Jamaica, Ministry of Health., 5952
Jansen, A.A., 6287
Jansen, G.R., 6176
Jegede, R.O., 6177
Jelliffe, D.B., 5755
Jelliffe, E.F., 5755
Jenkins, D., 6055
Jesudasan, M., 5875
Jezek, Z., 5993
Jhala, C.I., 6178
Jikeme, S.O., 6128
Jiménez Navas, H., 5931
Jobin, W.R., 6216, 6217
Joesoef, A., 6179
John, P., 6229
Jolly, B.C., 5870
Jopling, W.H., 5953
Jorge João, W.S., 6173
Jose, L., 5850
Joseph, S.C., 5612, 5902, 5903
Joseph, S.W., 6294
Joshi, V.S., 6191
Joy, C.T., 6252
Jussawalla, D.J., 6056
Jutsum, P., 6168

K

Kabuleeta, P., 6261
Kaiser Foundation International, Oakland, Cal., 6003
Kalissa, R., 5841
Kalra, K., 6132
Kambire, P., 5613
Kampel, M.M., 5863
Kanaaneh, H.A., 5873
Kanawati, A.A., 6091
Kane, R., 6025
Kane, T.T., 5950
Kansra, A.C., 6276
Kao, F.F., 5714
Kapur, R.L., 6057

Karchmer, S., 5735
Karjomanggolo, W.T., 5908
Karunaratne, K.E., 5842
Karyadi, D., 5756
Kassira, E.N., 6180
Kasteller, J., 6025
Kataria, M., 6029
Katz, F.M., 5904
Katz, M., 6245
Kaufman, M., 5757
Kaur, S., 6201
Kay, T., 6128
Keane, E., 6181
Kehoe, W.H., 5983
Kessie, F., 6148
Kewsiri, D., 6289
Khamnei, A.A., 6238
Khan, M.Y., 6182
Khanjanasthiti, P., 6183
Khanna, K.K., 6235
Khew, K.S., 6049
Kielmann, A.A., 6035, 6036
Kim, J.S., 5843
King, M., 6018
King, M.H., 5672
Kingston, R., 5844
Kitamoto, O., 6184
Klapper, M.S., 5867
Kleczkowski, B.M., 5673
Klein, R.E., 6107, 6193
Kleinman, A., 6058
Kloos, H., 6134, 6185
Knight, P., 6168
Kolasa, K., 5872
Koller, H., 6245
Koopman, J.S., 5758
Kostrzewski, J., 5670
Kotak, R.R., 6275
Krishna, K., 6143
Kronenfeld, J., 5867
Kroshel, F.T., 6028
Kuakuvi, N., 6148
Kuberski, T., 6186
Kumar, R., 6132
Kumar, V., 5674
Kumboneki, L., 6187
Kusin, J.A., 6287
Kwamina Duncan, J.W., 6188
Kwofie, K., 5759
Kyronseppa, H.J., 6189

L

Ladnyi, I.D., 6190
Ladrido-Ignacio, L., 6014
Laguna, J., 5637
Lal, S., 6191
Lama, J., 6203
Landmann, J., 5994
Landy, D., 6059
Lanoix, J.N., 5954
Lanotte, G., 6246
Lara P., E., 5975
Laraqui, A., 5638
Lari, F.A., 5734
Larsen, J.V., 6192
Lasker, J.N., 5639
Lasky, R.E., 6107
Latham, M.C., 5760, 6273, 6278
Lathem, W., 5905
Laurente, C.M., 5978
Lawrance, C., 6125, 6126
Lazo, R.F., 6115
le Bras, J., 5761
Leal de Moraes, L., 5762
Learmonth, A., 5763
Lechat, M.F., 6037
Lechtig, A., 6107, 6193
Lee, E.L., 5961
Lee, K.S., 5922
Lee, R.H., 5718
Lehman, J.S., 5753
Leininger, M., 5923
Lembaga Kesehatan Nasional, Indonesia., 5955
Lemma, A., 6185
Leon, C.A., 6061
Leprosy in India, New Delhi., 5845
Limson, S.G., 5978
Ling, J.C., 5829
Linhard, J., 6102, 6103
Loefler, I.P., 5700
Longhurst, R., 5764
Lorenzo y de Ibarreta, J., 5765, 5766
Lorenzo y Deal, J., 5765, 5766
Losos, J., 5956
Louhenapessy, A., 6294
Lourie, I.M., 5644
Louvet, M., 5767
Lovett, J., 5992
Lowenstein, E.W., 5742
Lowry, M.F., 6194
López, M.E., 5927
López-García, R., 5735
Lucas, A.O., 6218
Luft, H.S., 5705

M

Maben, G.K., 6174
MacArthur, D., 5622
MacDougall, J., 5846
Mace, D.R., 5614
Mackay, D.M., 5768
Madan, S.B., 6191
Maglalang, D.M., 5971
Mahalanabis, D., 6119
Mahan, J.M., 6028
Mahinpour, M., 5777
Mahmood, R.A., 6111
Mahmoud, A.A., 6271
Mahmud, S.H., 5769
Maibach, H.I., 5780
Maina-Ahlberg, B., 6060
Maitra, T.K., 6119

Majekodunmi, S., 6195
Majumdar, J., 6019
Malapit, S.D., 6196
Malaysia, Ministry of Health., 5770
Maleville, J., 6233
Malhotra, P., 6197
Mamtani, R., 6197
Mandiangu, M., 5841
Mangay-Angara, A., 6198
Manschot, P., 5888, 5957
Mansueto, S., 5771
Marfit, L.P., 5850
Margen, S., 6052, 6163
Margo, G.M., 6098
Markides, A.A., 5640
Markie, J., 5874
Marsh, B., 5847
Marshall, E.C., 5615
Martaresche, B., 6251
Martin, J.F., 5906
Martin, L.S., 6148
Martodipoero, S., 5672
Martorell, R., 6193
Maru, R., 6004, 6005
Marwoto, 5803
Mascarenhas, M.F., 6258
Mashalaba, N.N., 5916
Masse, P., 5936
Massey, J.A., 5984
Mata, L., 6299
Mathur, H.N., 5977
Matthews, C.M., 5875
Mauldin, W.P., 6199
Mayer, J., 5772
Mayer, L., 5772
Mbise, R.L., 6200
McCord, C., 5889, 6006
McCue, D.J., 5773
McGaghie, W.C., 5907
McKendrick, J., 5675
McLaren, D.S., 6091
Mehta, S., 6201
Mejia, A., 6026, 6027
Mejías, C., 6234
Mello Jorge, M.H. de, 6202
Melo, W., 6203
Menneson, M.J., 5890
Menon, P.K., 5641
Merckx, V., 5642
Merino, H., 6204
Merson, M.H., 6254
Metselaar, D., 5774
Meyer, J.D., 6204
Meyrick, R.L., 5870
Michon, L., 5958
Micklin, M., 5973, 6061
Miles, D.L., 6066
Miller, G.E., 5907
Ministry of Overseas Development, Trypanosomiasis Advisory Panel, London., 5775
Minnis, R.L., 5748
Minter, D.M., 5776
Mirchamsy, H., 5777
Misra, B.S., 6143
Misson, C.B., 6037
Misson, J.Y., 6037
Mitchell, H.S., 6205
Mitchnik, D., 5715
Mithal, S., 6170
Modarres Sadeghi, H.R., 6085
Moghissi, K.S., 5778
Mohammad, A., 5779
Mohan, C., 5643
Mohseni, M., 6062
Monintja, H.E., 5908
Mooneyhan, E., 5924
Mora, J.O., 6206
Moraes, M.A., 6232
Morales M., R., 6234
Morán, E.A., 5930
Moretto, R., 5909
Morgan, P.R., 5891
Morisky, D.E., 5927
Morley, D., 6140
Moscovice, I., 6038
Mouchet, J., 5749
Mozes, N., 6158
Muangman, D., 6207
Mukherjee, S.P., 6214
Muller, E.J., 6192
Muller, L.L., 5604
Mundo, F. del, 5927
Muñoz, R., 6074, 6075
Murayama, J., 5959
Murdock, A.I., 6208
Murray, A.B., 6209
Murray, C.J., 6209
Murray, M.B., 6209
Murray, M.J., 6209
Murthy, N., 6004
Muynck, A. de, 6210
Myres, A.E., 6211

N

Naceur, D., 6281
Nagalakshmi, P., 6135
Nagi, N.A., 6212
Naik, S.S., 6213
Nair, S.S., 6262
Najai, D., 6261
Nakano, J.H., 6174
Nandi, D.N., 6214
Narang, A., 5985
Narayan, V., 6291
Nath, L.M., 6241, 6242
Natino, N.B., 5876
Nazari, P., 5777
Ndo, B., 6215
Negrón Aponte, H., 6216, 6217
Nesheim, M.C., 6278
Neumann, A.K., 5644
Neve, J., 6158
Ngui, P.W., 5716

Niyomdech, N.C., 6087
Nocerino, J., 5622
Norbrega, F.J. de, 6268
Norgan, N.G., 6154
Nosny, P., 5616, 5645

O

O'Deen, L., 6176
Obi, G.O., 6095
Oduntan, S.O., 6218
Oficina Sanitaria Panamericana, Washington, D.C., 5676
Ofosu-Amaah, S., 5644
Ogunmekan, D.A., 6219
Ojo, M., 5864
Ojo, M.O., 5848
Okoisor, A.T., 6220
Olsen, D., 6025
Oluwande, P.A., 6221
Omolayole, A., 5818
OMS, Brazzaville., 5677
Onadeko, B.O., 6077
Onafowokan, E., 6225
Opena, M., 6222
Opilas, E.A., 5928
Ordóñez Carceller, C., 5849
Organización Panamericana de la Salud, Washington, D.C., 5960
Orkin, M., 5780
Ortega G., M., 6223
Ortin, E.L., 5978
Osiro, K., 6268
Osuhor, P.C., 6224
Ouchfoun, A., 6281
Owie, K., 5937
Oyebola, D.D., 6063
Oyeddiran, O.O., 5678
Oyemade, A., 6225

P

Pachauri,S., 6064
Pakistan, Planning and Development Division, Nutrition Cell., 5781
Pal, S.C., 5892
Palacios, S., 6226
Pan American Health Organization, Washington, D.C., 5679, 5782
Panatampom, P., 6087
Pandya, P.G., 6275
Pandya, P.M., 6275
Pandya, S.S., 6213
Pappoe, M.E., 6072
Papworth, P., 5862
Pardo de Travera, M., 5850
Parent, M.A., 6159
Parish, L.C., 5780
Park, C.B., 6227
Parker, R.L., 6035
Parrochia, E., 5617
Patel, A.J., 6007
Patel, J.M., 6121
Paul, F.M., 6228
Paul, T.M., 5680
Paulson, G., 6115
Payne, P., 5764
Pearson, C.A., 5830
Pediatría, Santiago., 5783
Pembrey, M.E., 6229
Penchenier, L., 5767
Pereira da Costa, A., 5863
Perera, W.D., 6112
Perkins, F.T., 5784
Perl, S., 5874
Perrine, R.P., 6229
Perrine, S., 6229
Perry, H.B., 5979, 5980
Pessanha, E., 5909
Petana, W.B., 5785
Petchclai, B., 6230
Petros, W.G., 6300
Petros-Barvazian, A., 5754
Phan, V.T., 6231
Philips, B.U., 6028
Pibouleau, R., 5673
Picou, D.I., 5941
Pierre-Louis, J.M., 6236, 6237
Pinheiro, F.P., 6232
Pirie, A., 6288
Pizurki, H., 6026
Plant, J., 5851
Platt, H.M., 5786
Pletsch, D.J., 5632
Pongpanich, B., 6230
Poon, G.K., 6270
Popkin, B.M., 5706, 6273
Pómes, C.E., 5930
Pradinaud, R., 6233
Prajitno, A., 6065
Premakumari, S., 6137
Premwatama, P., 6289
Prentice, A.M., 6129
Prías Barros, M.B., 5651
Provincial Institute of Maternal and Child Health Care, Kwangchow, China PR., 5852
Puentes R., R., 6234
Puri, R.K., 6235

Q

Quadros, C.A. de, 5787
Quesada, M.L., 5853
Quilici, M., 6251

R

Raccurt, C., 6236, 6237
Rahman, A., 6117
Raimbault, A.M., 5732
Rainer, L., 5925
Rajagopalan, S., 6276
Raju, B., 6256
Ramachandran, A., 6256

Ramachandran, K., 6170, 6242
Ramanujam, K., 6238
Ramírez de Arellano, A.B., 5988
Ramos, L., 6222
Ramos-Morales, F., 6217
Ramoso, T., 6222
Rao, K.V., 6239
Rao, T.V., 6004
Raphael, D., 5788
Rasheed, P., 6240
Ratard, R.C., 5789
Ratnam, S.S., 6049
Ratovo, L., 5724
Rau, P., 5790
Ray, A.P., 5791
Ray, D.K., 5618
Ray, S.N., 6089
Reddaiah, V.P., 6241, 6242
Reed, D., 6243
Regamey, R.H., 5792
Rege, V.L., 6258
Reid, D.B., 5854
Relyveld, E.H., 6142, 6244
Retherford, R.D., 6008
Reuter, H.H., 6098
Revue d'Epidémiologie et de Santé Publique, Paris., 5793
Reyes, M.O., 5877
Reys, M., 6258
Ribeiro Arantes, G., 5682
Richardson, S.A., 6245
Ridehalgh, F., 5794
Riedel, D., 6247
Rifkin, S.B., 6009
Rioux, J.A., 6246
Ripert, C., 6247
Rizo Castellón, S., 6082
Rizvi, S.N., 6269
Robert, D., 6142
Roberts, A.B., 5795
Robertson, A., 6297
Robinson, M.J., 5961
Robson, J.R., 6248
Roche, J.C., 6233
Rodríguez-Domínguez, J., 6249
Rody, N., 5878
Roemer, M.I., 5619, 5646, 5647, 5681, 5707, 5796, 6010, 6011, 6012, 6013, 6250
Rojas, R.M., 5934
Ronaghy, H.A., 5981
Rosado, A., 6284
Rosenblatt, R., 6038
Rother, F., 5962
Rougemont, A., 6251
Routledge, R., 6014
Roy, M.L., 5954
Roy, R.G., 6252, 6263
Royston, E., 6026
Rubin, M., 5879
Rubin, R.E., 5879
Rubin, W.V., 5879
Ruffino-Netto, A., 5682
Ruíz Gómez, J., 6253
Rushing, W.A., 6066

S

Sack, D.A., 6254
Saikawa, K., 6255
Saint-André, P., 5767
Sajid, A.W., 5907
Salber, E.J., 6053, 6067
Salinas, V., 6166
Samarawickrama, G.P., 6030
Samb, A., 6122
Sampoerno, D., 5982
Sankalé, M., 6105
Sanokho, A., 6148
Santhanakrishnan, B.R., 6256
Santhanam, S., 6143
Santo, S., 6205
Santos Hernández, C.M., 6257
Saphire-Bernstein, I., 5992
Sarn, J.E., 5880
Sarojini, K.S., 6136
Satia, J.K., 6004
Saturay, G.V., 5850
Sawyer, M.B., 6129
Sánchez Burgos, Y., 6253
Schamschula, R.G., 6068
Schliessmann, D.J., 5632
Schneider, R., 6264
Schneidman, B.S., 5918
Schuftan, C., 6020
Schulpen, T.W., 6278
Schwartzman, R.M., 5780
Schweitzer, S.O., 5708
Scotney, N., 5683, 5797
Scott, V.C., 5753
Seaman, J., 5893
Seaton, E.B., 5963
Seaton, R.S., 5963
Segal, H.E., 5605
Segal, J., 5648
Sehgal, V.N., 6258
Sehib, C., 5838
Selvamani, R., 6259
Selwyn, B.J., 5684
Senthivelu, C., 6260
Serjeantson, S., 6054
Shaffer, R., 6261
Shafyi, A., 5777
Shah, P.M., 5881, 6262
Shanmugham, C.A., 6263
Sharan, G., 5798
Sharma, J.K., 6029
Sharma, P.N., 5977
Shasha, W., 5871
Shiffman, M.A., 6264
Shinefield, H.R., 6130
Shor-Pinsker, V., 5735
Short, J.C., 5983
Shoup, F., 6229
Shrivastva, D.K., 6265

Shumacker, H.B., 5649
Sibert, J.R., 6266
Sighart, H., 6039
Sigulem, D.M., 6267, 6268
Sillonville, F., 5964
Silva de Lagrava, M., 6210
Simon, B., 5871
Simpson, D.I., 5965
Simwinga, J.A., 5799
Sina, G.C., 5761
Singh, A., 5800
Singh, A.P., 6269
Singh, J.V., 6291
Singh, M., 6270
Singh, R.N., 6169
Sinha, A.K., 5685
Sinnet, P., 6069
Sinnette, C.H., 5910
Sinniah, B., 6270
Sinniah, D., 6270
Sivagnanasundram, C., 6030
Smith, D.H., 6271
Soeprapto, 5803
Soffer, A., 5925
Solberg, A.I., 5620
Solimano, G., 6021
Solís B., J.M., 6272
Solomons, N.W., 5650
Solón, F.S., 6273
Somorin, A.O., 5801
Soto Padrón, F., 5651
South African Medical Research Council, Capetown., 5802
Sow, A., 6122
Speake, J.D., 6274
Sreenivasan, M.A., 6275
Srinivasa Murthy, R., 6014
Srinivasan, N., 6276
Srivastava, A.K., 6277
Staehling, N.W., 6112
Stanfield, J.P., 5941
Stanhope, J.M., 6054
Stead, W.W., 5966
Stephenson, L.S., 6278
Steveny, J., 6279
Stingl, P., 6015
Stith, J.B., 6164
Stock, R., 6031
Strickland, G.T., 6073
Stump, E., 6300
Suárez Rosas, L., 5651
Sudarshan, V., 6131
Suescun, J., 6206
Suharjono, 6280
Suleiman, M.A., 6014
Sumpaico, J., 6198
Sundar, P.R., 6238
Sung, L.H., 6058
Surjantoro, P., 5803
Sutejo, R., 5831, 5908, 6280
Sutter, E.E., 5855
Suwattika, P., 6230
Swoboda, J., 6025

T

Tabet-Derraz, O., 6281
Taha, S.A., 5856, 6282
Taitai, T., 5795
Tajeldin, H., 6040
Talogo, R.W., 5982
Tandon, B.N., 6170
Tanphaichitr, D., 6230
Tanphaichitr, P., 6230
Taraam, T., 5795
Tatochenko, V., 5804
Taylor, C.E., 6035
Taylor, J., 5857, 5858
Tekanene, J., 5795
Telder, T.V., 5907
Tera, T., 6186
Terris, M., 5652
Texas Medicine, Austin., 5701
Thapar, S.D., 5686
Thawarani, Y.P., 6265
Theron, A., 6246
Thilly, C.H., 5742
Thompson, D.D., 5702
Thorson, E.N., 5918
Thorstenson, M.A., 5859
Thouez, J.P., 5606
Thouvenot, D., 6111
Ticas, J.M., 5805
Tiendrebeogo, H., 6283
Tolentino R., A., 6272
Tolentino R., F., 6272
Tomkins, A.M., 5806
Tompkins, R.K., 6041
Tonon, M., 5882
Toro, E., 6203
Toure, A., 5767
Travassos da Rosa, A.P., 6232
Triolo, N., 5761
Tronick, E., 6107
Trova, P., 5761
Tudisco, E.S., 6267
Turner, A., 6264
Turpin, A., 6142
Turton, D., 6070

U

Ugalde, A., 6022
UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases, Geneva., 5607
UNICEF/WHO Joint Committee on Health Policy, Geneva., 5687
Union Internationale d'Education pour la Santé, Génève., 5688
University of Hawaii, Honolulu., 5653
Urquhart, A.E., 6092
Urrusti-Sanz, J., 6284
Urrutia, J.J., 6299

USA, Department of Health, Education, and Welfare., 5654, 5679
Uzodike, V.O., 6285

V

Vaisman, E., 6267
Valdecanas, O., 5877
Valdés, V., 6203
Valenzuela, C.Y., 6286
Valladares G., R., 5655
van Middelkoop, A., 5826
van Peenen, P.F., 6294
van Steenbergen, W.M., 6287
van Steirteghem, A., 6158
Vanderschmidt, L., 5984
Vargas, R., 5689
Vaughan, J.P., 5807
Velasco-Candano, L., 6284
Vellut, C., 6037
Venda[illegible]wamy, G., 6118
Venkataswamy, G., 6288
Vial, P., 6236, 6237
Viedma, C., 5690
Vieira Matos, A., 5691
Viesca Trevino, C., 6071
Vijayalakshmi, P., 6135
Villagrán G., G., 6016
Villar, J., 5894
Viseshakul, D., 6289, 6290
Viteri, F., 5730
Vohra, S.R., 6036
Voichick, J., 5872
Voorhoeve, A.M., 6287
Vuori, H., 5692

W

Wadsworth, G.R., 6248
Wagner, M., 6206
Wagstaff, L., 5621
Wakhlu, I., 6291
Walcoff, P., 5622
Walia, B.N., 5985
Wallace, N., 5872
Walsh, B.T., 6041
Ward, N.A., 5993
Ward, W.B., 6072
Warren, D.M., 6043
Warren, K.S., 5753, 6271
Wasti, S.M., 5808
Waterlow, J.C., 6292
Watson, A.R., 6293
Watten, R.H., 6294
Wazir, Y., 5734
Webbe, G., 5753
Webber, R.H., 5860
Weekly Epidemiological Record, Geneva., 6295, 6296
Weeks, D., 5702
Weinstein, R., 5986
Weissenberger, R., 6297
Wenlock, R.W., 6298
Wennen, E.M., 6218
Werner, D.B., 5917
Werner, R., 5717
Wert, F.S., 6034
Werthein, L.J., 5809
Whitehead, R.G., 5941, 6129
Whittaker, B., 5992
WHO, Copenhagen., 5623, 5693, 5810, 5811, 5911
WHO, Geneva., 5608, 5624, 5625, 5656, 5694, 5695, 5696, 5812, 5813, 5912, 5913, 5935, 5967, 5968, 5969, 6032
Whyte, M., 6069
Widmer, E., 5703
Wig, N.N., 6014
Wight, J.A., 5814
Wijers, D.J., 5815
Wilharta, A.S., 5831
Williamson, J.D., 5657
Windsor, R.A., 6065
Wolcott, B.W., 6041
Wood, R.W., 6041
Woodland, M., 6140
Wright, D., 6025
Wright, D.J., 6161
Wright, S.G., 5816
Wurapa, F.K., 5644, 6072
Wyatt, R.G., 6299

Y

Yang, R., 6247
Yarbrough, C., 6193
Yazov, L., 6300
Yee, T.T., 5718
Yolken, R.H., 6299
Yoshida-Ando, P., 6284
Young, M.D., 5632
Yourshalmi, P., 6085

Z

Zaheer, M., 6240
Zakaria, S., 6073
Zaki Hasen, K., 5719
Zavala V., J., 6223
Zimflou, I.A., 6247

Subject Index

(figures refer to abstract numbers)

A

Aborigines, *See also: Minority Group;*, 5658, 5675, 5854, 6113, 6162, 6165, 6248
Abortion, *See also: Birth Control;*, 5982, 6199, 6240
Administration, Disease Control, 5655, 5993, 5998
Administration, Environmental Health Services, 5935, 5946
Administration, Family Planning Programme, 6004
Administration, Health Centre, 5638, 5851, 5854, 5997, 6004, 6005
Administration, Health Education, 5867
Administration, Health Manpower, 5638
Administration, Health Services, 5634, 5638, 5647, 5653, 5655, 5689, 5838, 5849, 5952, 5988, 6005, 6011, 6015, 6022, 6033
Administration, Hospital, 5995
Administration, Mental Health Services, 5693
Administration, Training, 5613
Administration, Tuberculosis Programme, 5960
Administrative Aspect, 5613, 5634, 5638, 5647, 5653, 5655, 5660, 5689, 5742, 5748, 5838, 5849, 5851, 5854, 5867, 5910, 5952, 5960, 5988, 5993, 5995, 5997, 5998, 6004, 6005, 6011, 6015, 6022, 6033, 6242
Administrator, *See also: Health Manpower;*, 5623, 5696, 5752, 6003, 6004
Agricultural Sector, *See also: Food Production;*, 5636, 5644, 5648, 5686, 5715, 5725, 5757, 5764, 5776, 5779, 5781, 5792, 5796, 5808, 5833, 5836, 5865, 5934, 5963, 6044, 6070, 6088, 6134, 6150, 6179, 6236, 6237, 6270
Anaemia, *See also: Nutrition;*, 5604, 5746, 5806, 5816, 5843, 5970, 6054, 6083, 6087, 6095, 6103, 6106, 6130, 6158, 6162, 6165, 6170, 6173, 6182, 6209, 6229, 6240, 6251, 6267, 6270
Anaesthesia, *See also: Surgery;*, 5817, 5822, 5830, 5862, 5949
Annual Report, 5640
Antenatal Care, *See also: Clinic, Antenatal; Maternal Child Health; Pregnancy;*, 5728, 5743, 5755, 5778, 5826, 5829, 5894, 5939, 5942, 5970, 5977, 6107, 6192, 6200, 6203, 6208
Anthropometric Measurement, *See also: Evaluation, Nutrition; Nutrition;*, 5730, 5764, 5893, 5939, 6074, 6075, 6096, 6104, 6112, 6118, 6120, 6125, 6132, 6135, 6137, 6141, 6146, 6147, 6154, 6163, 6168, 6170, 6171, 6173, 6180, 6183, 6191, 6194, 6205, 6235, 6239, 6245, 6257, 6262, 6265, 6266, 6268, 6269, 6273, 6277, 6278, 6279, 6284, 6289, 6290
Appropriate Technology, 5660, 5667, 5672, 5676, 5706, 5753, 5819, 5820, 5858, 5883, 5884, 5885, 5886, 5887, 5888, 5889, 5890, 5891, 5892, 5893, 5894, 5934, 5951, 5995, 6018, 6126, 6129, 6174, 6176
Ascariasis, *See also: Parasitic Diseases;*, 5723, 5750, 5806, 6151, 6188, 6236, 6260, 6270, 6278, 6294
Attitudes, *See also: Survey;*, 5609, 5627, 5631, 5641, 5650, 5657, 5662, 5693, 5701, 5710, 5716, 5719, 5790, 5797, 5799, 5828, 5843, 5848, 5859, 5868, 5875, 5878, 5889, 5917, 5927, 5973, 5974, 5975, 5978, 5982, 5986, 5990, 5991, 6014, 6025, 6042, 6045, 6046, 6049, 6050, 6055, 6057, 6058, 6060, 6062, 6065, 6066, 6072, 6201, 6222, 6227, 6291
Audiovisual Aid, *See also: Teaching Aid;*, 5868, 5870, 5880, 5969
Auxiliary Health Worker, *See also: Barefoot Doctor; Community Health Aide; Community Health Worker; Dispensary Attendant; Dresser; Feldsher; Health Extension Officer; Health Manpower; Lady Health Visitor; Medex; Medical Assistant; Ophthalmic Medical Assistant; Paramedic; Rural Health Promoter; Traditional Birth Attendant;*, 5603, 5608, 5609, 5613, 5616, 5619, 5622, 5629, 5630, 5641, 5663, 5666, 5677, 5681, 5685, 5715, 5812, 5834, 5835, 5836, 5840, 5846, 5847, 5850, 5853, 5877, 5883, 5894, 5895, 5900, 5914, 5915, 5916, 5917, 5918, 5936, 5947, 5968, 5979, 5980, 5981, 5985, 6005, 6006, 6019, 6023, 6032, 6034, 6038, 6041, 6046, 6242
Auxiliary, Dental, *See also: Dental Hygienist; Dental Manpower;*, 5930, 5932
Auxiliary, Maternal Child Health, 5894, 5968
Auxiliary, Midwife, *See also: Midwife; Traditional Birth Attendant;*, 5619
Auxiliary, Multipurpose, 5641, 6005
Auxiliary, Nurse, *See also: Nurse;*, 5613, 5619
Auxiliary, Nurse-midwife, *See also: Nurse-midwife; Traditional Birth Attendant;*, 5613
Auxiliary, Orthopaedics, 5936
Auxiliary, Single-purpose, 5616, 6005

B

Barefoot Doctor, *See also: Auxiliary Health Worker;*, 5619, 5852, 5895

BCG Vaccination, 5682, 5722, 5741, 5792, 5794, 5798, 5838, 5888, 6079, 6133, 6169, 6219, 6228, 6272, 6283, 6296
Bibliography, *See also: Mass Media;*, 5602, 5603, 5604, 5605, 5606, 5608, 5708, 5899, 6160, 6164
Birth Control, *See also: Abortion; Family Planning; Intrauterine Device; Tubal Ligation; Vasectomy;*, 5602, 5971, 5986, 6047, 6199, 6298
Birthrate, *See also: Demography;*, 5662, 5926, 5950, 6008, 6044, 6064, 6123, 6140, 6175, 6227, 6298
Blindness, *See also: Eye Diseases;*, 5615, 5756, 5800, 5855, 5967, 6238, 6247, 6273, 6288
Brain Drain, *See also: Migration;*, 5624, 5697, 5913, 6026, 6027
Breast-feeding, *See also: Infant Feeding;*, 5604, 5728, 5731, 5754, 5755, 5778, 5788, 5808, 5864, 5865, 5878, 5880, 5944, 5948, 5955, 5968, 5970, 6047, 6052, 6084, 6127, 6129, 6135, 6163, 6211, 6227, 6262, 6287, 6289, 6290, 6293, 6298
Burns, *See also: Emergency Medical Care;*, 5820, 5940

C

Cancer, 5763, 5867, 6056, 6088, 6133, 6153, 6243, 6248
Cardiovascular Diseases, 5807, 6069, 6077, 6106, 6215, 6250, 6285, 6300
Cataracts, *See also: Eye Diseases;*, 5861, 5949, 5967
Child, *See also: Child Health; Family; Infant; Maternal Child Health; School Health;*, 5606, 5719, 5722, 5728, 5734, 5741, 5743, 5747, 5752, 5761, 5762, 5764, 5777, 5778, 5780, 5781, 5788, 5790, 5795, 5798, 5804, 5805, 5806, 5808, 5812, 5813, 5816, 5831, 5840, 5846, 5852, 5865, 5879, 5881, 5885, 5892, 5936, 5958, 5959, 5961, 5995, 5999, 6001, 6049, 6060, 6065, 6074, 6075, 6076, 6078, 6079, 6080, 6083, 6089, 6090, 6091, 6092, 6093, 6095, 6096, 6098, 6099, 6111, 6112, 6116, 6118, 6119, 6120, 6122, 6124, 6125, 6132, 6137, 6138, 6140, 6143, 6144, 6146, 6147, 6148, 6151, 6154, 6158, 6162, 6165, 6166, 6169, 6173, 6174, 6175, 6178, 6180, 6182, 6183, 6191, 6195, 6196, 6201, 6203, 6205, 6207, 6212, 6216, 6217, 6219, 6225, 6230, 6234, 6237, 6239, 6245, 6248, 6253, 6254, 6256, 6257, 6258, 6261, 6265, 6268, 6269, 6270, 6274, 6276, 6278, 6279, 6280, 6287, 6288, 6289, 6290, 6291, 6294, 6295, 6296, 6299, 6300
Child Care, *See also: Social Services;*, 5865, 6225
Child Health, *See also: Child; Clinic, Child Health; Infant Feeding; Maternal Child Health; Pediatrics;*, 5629, 5728, 5730, 5734, 5741, 5743, 5754, 5761, 5762, 5765, 5766, 5772, 5778, 5781, 5798, 5804, 5806, 5812, 5816, 5824, 5826, 5840, 5846, 5852, 5856, 5859, 5865, 5866, 5881, 5884, 5885, 5892, 5901, 5908, 5909, 5910, 5941, 5955, 5958, 5959, 5961, 5970, 5995, 5999, 6001, 6016, 6018, 6034, 6035, 6051, 6065, 6078, 6083, 6084, 6090, 6091, 6092, 6093, 6096, 6107, 6112, 6118, 6120, 6122, 6124, 6126, 6132, 6135, 6146, 6147, 6148, 6151, 6155, 6158, 6159, 6162, 6171, 6173, 6180, 6182, 6185, 6191, 6194, 6195, 6201, 6203, 6205, 6210, 6212, 6225, 6228, 6234, 6235, 6257, 6261, 6265, 6267, 6268, 6273, 6276, 6277, 6279, 6282, 6283, 6284, 6288, 6290, 6291, 6294
Cholera, *See also: Infectious Diseases;*, 5669, 5724, 5738, 5739, 5768, 5792, 5795, 5831, 5892, 5959, 6131, 6143, 6152, 6184, 6186, 6280
Clinic, *See also: Health Centre;*, 5621, 5626, 5628, 5641, 5673, 5794, 5829, 5834, 5839, 5844, 5846, 5848, 5851, 5854, 5856, 5859, 5978, 5994, 5999, 6034, 6124, 6177
Clinic, Antenatal, *See also: Antenatal Care;*, 5829
Clinic, Child Health, *See also: Child Health;*, 5846, 5856, 5955, 5999, 6034, 6124
Clinic, Maternal Child Health, *See also: Maternal Child Health;*, 5834, 5955
Clinic, Outpatient, *See also: Outpatient Care;*, 5621, 5628, 5848, 5851, 5854, 5859, 5978, 5994, 6006, 6177
Clinic, Rural, 5839
Clinic, Tuberculosis, *See also: Tuberculosis Programme;*, 5794
Communications, *See also: Mass Media;*, 5663, 5664, 5681, 5699, 5873, 5877, 5992, 6080, 6293
Community, *See also: Village;*, 5668, 5684, 5849, 6009
Community Development, *See also: Planning, Development; SocialParticipation;*, 5603, 5668, 5676, 5732, 5773, 5840, 5843
Community Diagnosis, *See also: Epidemiology;*, 5842, 5843, 5853
Community Health, *See also: Community Medicine;*, 5603, 5609, 5628, 5629, 5631, 5646, 5648, 5686, 5693, 5702, 5763, 5835, 5836, 5840, 5847, 5863, 5878, 5880, 5898, 5901, 5902, 5903, 5906, 5931, 5938, 5939, 5963, 5990, 6007, 6009, 6046, 6094
Community Health Aide, *See also: Auxiliary Health Worker;*, 5622
Community Health Worker, *See also: Auxiliary Health Worker;*, 5603, 5609, 5634, 5641, 5666, 5677, 5680, 5835, 5836, 5846, 5847, 5848, 5850, 5853, 5877, 5915, 5916, 5917, 5963, 5981, 5985, 6005, 6019, 6035
Community Medicine, *See also: Community Health;*, 5824, 5902, 5903, 5905, 6009
Community Nurse, *See also: Nurse;*, 5748
Conjunctivitis, *See also: Eye Diseases;*, 5949, 6031, 6195
Construction, 5863, 5887, 5891, 5912, 5935, 5946, 6272
Construction, Housing, 5948
Construction, Sanitary Facilities, *See also: Sanitary Facilities;*, 5863, 5891, 5935, 5946, 6272
Construction, School, *See also: School;*, 5912
Construction, Water Supply, *See also: Water Supply;*, 5887, 5891, 5935, 5948
Continuing Education, *See also: Training;*, 5732, 5811
Cost Measures, *See also: Health Economics;*, 6039
Cost-benefit Analysis, *See also: Health Economics;*, 5682, 5706, 5983, 6034, 6035, 6036, 6037, 6039
Costs and Cost Analysis, *See also: Health Economics;*, 5644, 5708, 5742, 5903, 5957, 6003, 6006, 6038, 6039, 6041

Cultural Aspect, 5650, 5653, 5667, 5698, 5709, 5711, 5715, 5717, 5718, 5731, 5737, 5754, 5773, 5783, 5788, 5799, 5828, 5854, 5855, 5868, 5876, 5916, 5923, 5937, 5969, 5972, 5982, 6028, 6031, 6044, 6045, 6046, 6047, 6049, 6051, 6052, 6053, 6054, 6055, 6057, 6058, 6059, 6060, 6061, 6062, 6063, 6064, 6066, 6067, 6068, 6128, 6140, 6141, 6172, 6173, 6197, 6199, 6211, 6214, 6224, 6227, 6239, 6243, 6261, 6287, 6289
Cultural Change, *See also: Culture;*, 5639, 5649, 5710, 5711, 5719, 5882, 6048, 6054, 6059
Culture, *See also: Cultural Change; Ethics; Folklore; Language; Social and Cultural Anthropology; Tradition; Traditional Medicine; Women;*, 5710, 5714, 5716, 5738, 5769, 5859, 5864, 5868, 5871, 5873, 5876, 5878, 5923, 5924, 5982, 6033, 6042, 6043, 6044, 6046, 6047, 6049, 6050, 6056, 6060, 6061, 6065, 6068, 6069, 6070, 6071, 6072, 6108, 6127, 6167, 6172, 6214, 6224, 6228, 6239, 6279
Curative Medicine, 5639, 5819
Curriculum, *See: specific health worker. See also: Training Course;*, 5612, 5614, 5691, 5696, 5787, 5814, 5895, 5898, 5902, 5903, 5905, 5906, 5907, 5908, 5910, 5911, 5918, 5923, 5924, 5929, 5933, 5937, 5975, 6030
Curriculum, Administrator, 5696, 5787
Curriculum, Dentist, 5929, 5975
Curriculum, Health Education, 5937
Curriculum, Health Manpower, 5614
Curriculum, Laboratory Technician, 5975
Curriculum, Medical Assistant, 5918
Curriculum, Nurse, 5691, 5918, 5923, 5924, 5975
Curriculum, Physician, 5612, 5843, 5895, 5898, 5902, 5903, 5905, 5906, 5907, 5908, 5910, 5911, 5912, 5975, 6030
Curriculum, Sanitary Engineer, 5933
Curriculum, Teacher, 5814

D

Dai, *See also: Traditional Birth Attendant;*, 5886
Danfa Project, Ghana, 5644, 5710, 5839
Data Collection, *See also: Information System; Survey;*, 5634, 5653, 5671, 5678, 5684, 5692, 5758, 5786, 5809, 5811, 5843, 6088, 6149, 6202, 6242, 6243, 6286
Demography, *See also: Birthrate; Life Expectancy; Migration; Mortality; Population; Population Increase; Statistical Data;*, 5670, 5843, 5950, 6064, 6239
Dental Health, 5651, 5770, 5797, 5865, 5867, 5879, 5930, 5932, 6068, 6100, 6113, 6133, 6250, 6265, 6274
Dental Hygienist, *See also: Auxiliary, Dental;*, 5932, 6028
Dental Manpower, *See also: Auxiliary, Dental; Dentist; Dentistry; Health Manpower;*, 5651, 5930
Dental Services, 5640, 5651, 5931, 6067
Dentist, *See also: Dental Manpower;*, 5620, 5685, 5929, 5930, 5931, 5932, 5973, 5975, 6032
Dentistry, *See also: Dental Manpower;*, 5930, 5931, 5932
Dermatology, *See also: Skin Diseases;*, 5767, 5801, 6153, 6157
Developed Country, 5652, 5657, 5681, 5690, 5926, 6010, 6032, 6100
Developing Country, 5609, 5615, 5619, 5652, 5663, 5664, 5672, 5673, 5681, 5690, 5697, 5707, 5719, 5725, 5726, 5728, 5729, 5745, 5746, 5753, 5754, 5764, 5784, 5788, 5792, 5807, 5812, 5816, 5830, 5858, 5882, 5883, 5888, 5894, 5897, 5905, 5910, 5924, 5926, 5936, 5937, 5938, 5940, 5949, 5951, 5961, 5967, 5984, 6009, 6010, 6032, 6059, 6100, 6149, 6150, 6176, 6199, 6211, 6244, 6292
Diagnosis, *See also: Screening;*, 5608, 5627, 5734, 5750, 5753, 5761, 5767, 5771, 5780, 5782, 5785, 5795, 5798, 5801, 5806, 5812, 5816, 5857, 5858, 5943, 5947, 5951, 5953, 5958, 5965, 5967, 6041, 6063, 6092, 6130, 6144, 6159, 6177, 6181, 6184, 6188, 6217, 6223, 6233, 6256, 6258, 6291
Diarrhea, *See also: Enteric Diseases;*, 5604, 5629, 5650, 5758, 5768, 5803, 5806, 5824, 5831, 5872, 5885, 5892, 5948, 5955, 5961, 5970, 6031, 6060, 6098, 6099, 6118, 6119, 6148, 6159, 6165, 6166, 6207, 6212, 6241, 6250, 6254, 6264, 6280, 6299
Diet, *See also: Food; Nutrition;*, 5730, 5737, 5745, 5746, 5755, 5769, 5772, 5778, 5788, 5790, 5802, 5813, 5878, 5941, 5944, 5948, 5959, 6021, 6068, 6070, 6091, 6095, 6108, 6135, 6148, 6150, 6160, 6163, 6167, 6170, 6172, 6201, 6205, 6206, 6222, 6240, 6248, 6288, 6290
Diphtheria, *See also: Infectious Diseases;*, 5741, 5752, 5792, 5841, 5888, 6080, 6099, 6110, 6121, 6169, 6198, 6219, 6230, 6244
Direct Service Costs, *See also: Health Economics;*, 5957, 6035, 6041
Directory, 5601
Disabled, *See also: Rehabilitation;*, 5845
Disaster, 5650, 5727, 5860, 6046, 6070, 6082, 6108
Disease Control, *See also: Epidemiology; Infectious Diseases; Immunization; Mass Campaign, Disease Control; OralRehydration; Pest Control;*, 5601, 5605, 5607, 5627, 5629, 5632, 5641, 5645, 5650, 5653, 5655, 5669, 5670, 5672, 5682, 5695, 5712, 5720, 5721, 5723, 5724, 5725, 5726, 5727, 5729, 5730, 5733, 5736, 5738, 5739, 5740, 5742, 5747, 5749, 5750, 5751, 5752, 5753, 5756, 5758, 5760, 5762, 5763, 5767, 5768, 5771, 5774, 5775, 5776, 5777, 5780, 5782, 5784, 5785, 5786, 5787, 5789, 5791, 5792, 5794, 5795, 5798, 5799, 5800, 5801, 5803, 5804, 5806, 5809, 5810, 5811, 5812, 5815, 5816, 5819, 5820, 5825, 5831, 5837, 5841, 5844, 5850, 5852, 5855, 5857, 5865, 5875, 5884, 5885, 5888, 5889, 5891, 5892, 5913, 5936, 5937, 5938, 5939, 5940, 5941, 5942, 5943, 5946, 5947, 5951, 5953, 5954, 5956, 5959, 5960, 5965, 5966, 5967, 5970, 5993, 5998, 6011, 6036, 6037, 6039, 6055, 6068, 6072, 6073, 6079, 6086, 6093, 6094, 6097, 6100, 6101, 6109, 6110, 6111, 6114, 6119, 6121, 6131, 6133, 6138, 6139, 6142, 6156, 6159, 6161, 6165, 6166, 6179, 6181, 6184, 6190, 6198, 6209, 6213, 6216, 6218, 6219, 6226, 6228, 6229, 6230, 6231, 6233, 6238, 6244, 6252, 6253, 6254, 6255, 6256, 6258, 6259, 6260, 6263, 6272, 6273, 6278,

6280, 6297
Dispensary, *See also: Health Centre;*, 5847, 5999, 6023, 6029
Dispensary Attendant, *See also: Auxiliary Health Worker;*, 6023
Distribution, 5617, 5626, 5633, 5639, 5642, 5681, 5685, 5697, 5698, 5699, 5701, 5702, 5703, 5896, 5902, 5930, 5979, 5987, 6000, 6011, 6013, 6015, 6016, 6019, 6024, 6025, 6026, 6027, 6028, 6029, 6030, 6031, 6038, 6053
Distribution, Dentist, 5930, 6032
Distribution, Health Manpower, 5987, 6028, 6032
Distribution, Health Services, 5626, 5633, 5639, 5642, 5670, 5699, 5701, 5702, 5703, 5987, 6000, 6016, 6031, 6038, 6053
Distribution, Hospital, 5698, 6011, 6013, 6032
Distribution, Medical Assistant, 5979, 6032
Distribution, Mental Health Services, 6024
Distribution, Nurse, 5624, 6026, 6027, 6032
Distribution, Pharmacist, 6032
Distribution, Physician, 5617, 5624, 5626, 5681, 5685, 5697, 5699, 5700, 5701, 5703, 5896, 5902, 6011, 6015, 6016, 6019, 6025, 6026, 6027, 6029, 6030, 6032
Dresser, *See also: Auxiliary Health Worker;*, 5844
Drugs, *See also: Medicinal Plant;*, 5605, 5607, 5627, 5640, 5657, 5659, 5717, 5720, 5750, 5753, 5767, 5775, 5778, 5780, 5794, 5795, 5798, 5806, 5812, 5817, 5819, 5820, 5822, 5830, 5831, 5846, 5861, 5890, 5940, 5942, 5953, 5955, 5956, 5959, 5961, 5965, 5966, 5970, 5987, 6007, 6014, 6037, 6039, 6041, 6085, 6093, 6139, 6144, 6161, 6213, 6216, 6233, 6251, 6256, 6259, 6278
Dukun, *See also: Traditional Birth Attendant;*, 5982

E

Economic Aspect, 5653, 5661, 5724, 5788, 5796, 5819, 5905, 6000, 6017, 6021, 6044, 6287
Economic Development, *See also: Health Economics; Planning, Development; Socioeconomic Development;*, 6020
Education, *See also: Student; Teacher; Training Centre;*, 5602, 5614, 5615, 5640, 5651, 5663, 5664, 5677, 5680, 5683, 5688, 5711, 5719, 5722, 5729, 5732, 5751, 5755, 5772, 5787, 5788, 5797, 5799, 5804, 5811, 5814, 5831, 5836, 5848, 5852, 5853, 5854, 5856, 5859, 5861, 5863, 5864, 5865, 5866, 5867, 5868, 5869, 5870, 5871, 5872, 5873, 5874, 5875, 5876, 5877, 5878, 5879, 5880, 5881, 5882, 5901, 5932, 5935, 5937, 5941, 5945, 5954, 5959, 5964, 5966, 5971, 5990, 6055, 6061, 6072, 6078, 6136, 6137, 6160, 6173, 6196, 6238, 6272
Education, Dental Health, 5797, 5879, 5932
Education, Environmental Health, 5688, 5751, 5935, 6264
Education, Family Planning, 5797, 5874, 5971
Education, Health, 5615, 5640, 5651, 5653, 5663, 5664, 5677, 5678, 5680, 5683, 5688, 5722, 5751, 5787, 5797, 5799, 5804, 5811, 5831, 5836, 5848, 5852, 5853, 5854, 5859, 5861, 5863, 5864, 5865, 5866, 5867, 5868, 5869, 5870, 5871, 5873, 5875, 5878, 5879, 5880, 5881, 5882, 5901, 5937, 5938, 5939, 5946, 5954, 5959, 5963, 5964, 5966, 5969, 5990, 6055, 6196, 6238, 6272
Education, Nutrition, 5729, 5732, 5755, 5772, 5788, 5797, 5804, 5814, 5848, 5856, 5865, 5872, 5876, 5877, 5878, 5881, 5882, 5937, 5941, 5948, 6078, 6136, 6137, 6160, 6196
Education, Sex, 5602, 5614, 5804, 5811, 5865, 5866, 5945
Emergency Health Services, *See also: Health Services;*, 5650, 5654, 5727, 5860
Emergency Medical Care, *See also: Burns; First Aid; Poisons;*, 5650, 5818, 5823, 5825, 5851, 5860, 5938, 5949, 5962
Enteric Diseases, *See also: Diarrhea; Gastroenteritis; Infectious Diseases;*, 5726, 5727, 6184, 6188, 6260
Environmental Health, *See also: Living Conditions; Sanitation; Water Supply; Water Treatment;*, 5636, 5640, 5653, 5656, 5668, 5681, 5725, 5729, 5739, 5751, 5808, 5863, 5891, 5933, 5934, 5935, 5946, 5954, 6069, 6073, 6136, 6210, 6228, 6261, 6275
Environmental Health Services, 5656, 5838
Epidemiology, *See also: Community Diagnosis; Disease Control; Health Indicators; Medical Records; Survey;*, 5605, 5627, 5641, 5646, 5648, 5721, 5722, 5724, 5726, 5733, 5734, 5736, 5738, 5739, 5742, 5747, 5749, 5750, 5751, 5752, 5758, 5761, 5763, 5767, 5774, 5775, 5776, 5780, 5782, 5789, 5793, 5800, 5807, 5809, 5810, 5812, 5815, 5820, 5821, 5824, 5843, 5855, 5932, 5953, 5960, 5965, 5966, 5993, 5998, 6010, 6023, 6030, 6056, 6069, 6073, 6076, 6077, 6086, 6088, 6089, 6092, 6094, 6097, 6099, 6100, 6101, 6114, 6115, 6117, 6121, 6122, 6128, 6131, 6134, 6139, 6143, 6144, 6145, 6150, 6151, 6152, 6153, 6156, 6157, 6161, 6166, 6178, 6179, 6181, 6184, 6185, 6186, 6187, 6188, 6189, 6195, 6197, 6204, 6207, 6212, 6214, 6217, 6223, 6226, 6228, 6231, 6232, 6233, 6236, 6237, 6243, 6246, 6247, 6248, 6250, 6252, 6255, 6256, 6258, 6260, 6263, 6270, 6271, 6275, 6281, 6285, 6294, 6295, 6296, 6297, 6299, 6300
Equipment, *See also: Construction, Equipment;*, 5601, 5672, 5742, 5817, 5820, 5823, 5826, 5827, 5830, 5858, 5861, 5870, 5884, 5885, 5886, 5888, 5893, 5935, 5957, 6018, 6074, 6176, 6283
Equipment, Clinic, 5955
Equipment, Health Centre, 5601, 5673
Equipment, Hospital, 5673, 5817, 5820, 5827
Equipment, Mobile Health Unit, 5673
Equipment, Nutrition Evaluation, 5893, 6074
Equipment, Sanitation, 5935
Equipment, Vaccination, 6283
Ergonomics, *See also: Occupational Health;*, 5636
Eskimos, 6033, 6208, 6248
Ethics, *See also: Culture;*, 5695, 5920, 6127

Evaluation, 5603, 5606, 5616, 5621, 5626, 5634, 5636, 5662, 5665, 5668, 5670, 5671, 5672, 5683, 5684, 5715, 5717, 5724, 5729, 5730, 5731, 5733, 5742, 5748, 5750, 5753, 5759, 5760, 5764, 5769, 5772, 5773, 5778, 5781, 5784, 5785, 5787, 5788, 5793, 5794, 5798, 5802, 5803, 5809, 5811, 5819, 5826, 5829, 5831, 5832, 5833, 5837, 5838, 5841, 5848, 5850, 5851, 5853, 5856, 5866, 5868, 5869, 5870, 5871, 5872, 5874, 5877, 5879, 5881, 5884, 5885, 5887, 5889, 5890, 5892, 5893, 5894, 5898, 5902, 5903, 5905, 5907, 5909, 5912, 5915, 5916, 5917, 5927, 5932, 5941, 5958, 5960, 5969, 5972, 5974, 5975, 5976, 5977, 5978, 5979, 5980, 5981, 5982, 5983, 5984, 5985, 5986, 5987, 5988, 5989, 5990, 5991, 5992, 5993, 5994, 5995, 5996, 5997, 5999, 6000, 6001, 6002, 6003, 6005, 6006, 6007, 6008, 6010, 6015, 6016, 6017, 6018, 6019, 6020, 6021, 6022, 6024, 6026, 6034, 6036, 6037, 6038, 6040, 6041, 6047, 6051, 6054, 6058, 6059, 6061, 6068, 6069, 6074, 6075, 6078, 6079, 6080, 6081, 6083, 6084, 6086, 6087, 6089, 6090, 6091, 6092, 6093, 6094, 6095, 6096, 6097, 6098, 6100, 6101, 6102, 6103, 6104, 6105, 6106, 6107, 6108, 6109, 6110, 6111, 6112, 6118, 6119, 6120, 6123, 6124, 6125, 6126, 6129, 6130, 6132, 6135, 6136, 6137, 6138, 6141, 6142, 6146, 6147, 6148, 6149, 6151, 6154, 6155, 6156, 6158, 6159, 6160, 6161, 6162, 6163, 6164, 6165, 6167, 6168, 6169, 6170, 6171, 6172, 6173, 6174, 6176, 6177, 6180, 6182, 6183, 6184, 6186, 6187, 6190, 6191, 6192, 6193, 6194, 6195, 6196, 6198, 6199, 6200, 6201, 6204, 6205, 6206, 6208, 6209, 6211, 6212, 6213, 6214, 6215, 6216, 6217, 6218, 6221, 6222, 6225, 6226, 6229, 6230, 6231, 6234, 6235, 6239, 6240, 6242, 6244, 6245, 6249, 6251, 6252, 6253, 6254, 6255, 6256, 6257, 6259, 6261, 6262, 6263, 6264, 6265, 6266, 6267, 6268, 6270, 6272, 6273, 6274, 6276, 6277, 6278, 6279, 6280, 6282, 6283, 6284, 6287, 6288, 6289, 6290, 6291, 6292, 6294

Evaluation, Administration, 5997

Evaluation, Anthropometric Measurement, 6074, 6075, 6168, 6268

Evaluation, Auxiliary, 5603, 6005

Evaluation, Child Health, 5826, 5958, 6035, 6051, 6083, 6084, 6091, 6092, 6096, 6112, 6118, 6120, 6124, 6125, 6132, 6135, 6147, 6148, 6151, 6158, 6159, 6162, 6171, 6173, 6180, 6182, 6194, 6195, 6201, 6205, 6212, 6225, 6235, 6265, 6273, 6277, 6282, 6288, 6290, 6291, 6294

Evaluation, Clinic, 5829, 5846, 5856, 5978, 5999, 6006, 6034, 6124

Evaluation, Community Health Worker, 5634, 5846, 5915, 5916, 5981, 5985, 6005, 6035

Evaluation, Curriculum, 5898, 5907

Evaluation, Data Collection, 6242

Evaluation, Dental Health, 5932, 6100, 6274

Evaluation, Disease Control, 5724, 5733, 5742, 5750, 5753, 5760, 5792, 5794, 5798, 5809, 5811, 5819, 5831, 5837, 5850, 5884, 5885, 5889, 5892, 5941, 5993, 6036, 6037, 6068, 6079, 6086, 6093, 6094, 6097, 6101, 6109, 6110, 6111, 6119, 6138, 6142, 6156, 6159, 6161, 6165, 6184, 6190, 6209, 6213, 6216, 6218, 6219, 6226, 6228, 6230, 6231, 6244, 6252, 6253, 6254, 6255, 6256, 6259, 6263, 6272, 6278, 6280

Evaluation, Environmental Health Services, 5838

Evaluation, Equipment, 6176, 6283

Evaluation, Family Health, 6187

Evaluation, Family Planning Programme, 5773, 5874, 6006, 6199

Evaluation, Health, *See also: Health Indicators; Morbidity; Physical Examination;*, 5606, 5662, 5670, 5785, 5793, 6054, 6069, 6087, 6102, 6103, 6105, 6106, 6107, 6170, 6172, 6193, 6208, 6209, 6214, 6215, 6229, 6240, 6251, 6270

Evaluation, Health Centre, 5832, 5851, 5994

Evaluation, Health Education, 5683, 5811, 5866, 5869, 5870, 5871, 5879, 5881

Evaluation, Health Services, 5626, 5634, 5636, 5669, 5670, 5671, 5684, 5905, 5983, 5987, 5988, 5989, 5990, 5991, 5992, 5999, 6000, 6003, 6005, 6006, 6007, 6010, 6015, 6016, 6040, 6249

Evaluation, Health Team, 5621

Evaluation, Inpatient Care, 5803, 5831, 5997

Evaluation, Mass Campaign, 5841, 5993, 6094, 6216, 6272

Evaluation, Maternal Child Health, 5636, 5894, 6051, 6200, 6235

Evaluation, Maternal Child Health Services, 5833, 5838, 6192, 6279

Evaluation, Medex, 6041

Evaluation, Medical Assistant, 5979, 5980, 6038, 6041

Evaluation, Medical Records, 5995, 6126, 6177

Evaluation, Mental Health, 6061

Evaluation, Mental Health Services, 6002, 6024

Evaluation, Midwife, 5829

Evaluation, Nurse, 5848

Evaluation, Nurse Practitioner, 5974, 5978, 6038

Evaluation, Nurse-midwife, 5986

Evaluation, Nutrition, *See also: Anthropometric Measurement;*, 5662, 5729, 5730, 5731, 5759, 5764, 5769, 5778, 5802, 5872, 5893, 5941, 5958, 6074, 6075, 6078, 6090, 6091, 6095, 6096, 6098, 6104, 6108, 6112, 6118, 6123, 6124, 6125, 6127, 6129, 6132, 6135, 6137, 6141, 6146, 6147, 6148, 6154, 6158, 6160, 6163, 6167, 6168, 6170, 6171, 6173, 6176, 6180, 6183, 6194, 6196, 6201, 6205, 6207, 6209, 6211, 6212, 6222, 6239, 6240, 6245, 6262, 6265, 6266, 6267, 6268, 6278, 6279, 6284, 6287, 6288, 6289, 6290, 6292

Evaluation, Nutrition Education, 5877, 5881, 5941, 6136

Evaluation, Nutrition Programme, 5772, 5781, 5788, 6006, 6035, 6098, 6108, 6125, 6137, 6149, 6191, 6193, 6196, 6201, 6206, 6234, 6257, 6262, 6267, 6276

Evaluation, Outpatient Care, 5997, 6006

Evaluation, Outpatient Clinic, 5994

Evaluation, Pharmacist, 5983

Evaluation, Pharmacy, 5999

Evaluation, Physician, 5907, 5917, 5989

Evaluation, Planning, 5665, 5668, 6017, 6019, 6020, 6021, 6022, 6026

Evaluation, Project, 5748, 5853, 5871, 5938, 5978, 5981, 5986, 5988, 6003, 6006, 6018
Evaluation, Rural Health Promoter, 5917
Evaluation, Sanitation Programme, 6261, 6264
Evaluation, Sanitation Services, 5996
Evaluation, Screening, 5811, 6130, 6217
Evaluation, Social Worker, 5976
Evaluation, Student, 5907, 5912
Evaluation, Survey, 5793, 6008
Evaluation, Teacher, 5912, 5972
Evaluation, Teaching Aid, 5868, 5969, 6242
Evaluation, Teaching Method, 5909
Evaluation, Traditional Birth Attendant, 5829, 5927, 5977, 5982
Evaluation, Traditional Medicine, 5717, 6059
Evaluation, Traditional Practitioner, 5717, 5999, 6058, 6059
Evaluation, Training, 5614, 5616, 5715, 5898, 5902, 5903, 5912, 5975, 5977, 5984, 6003, 6242
Evaluation, Tuberculosis Programme, 5837, 5960
Evaluation, Vaccination, 5784, 6079
Evaluation, Vaccination Programme, 5787, 5841, 6001, 6080, 6089, 6109, 6110, 6111, 6142, 6155, 6169, 6174, 6198, 6218, 6219, 6244, 6283
Evaluation, Water Supply, 5887, 5935, 6186, 6204, 6221, 6264
Eye Diseases, *See also: Blindness; Conjunctivitis; Cataracts; Glaucoma; Infectious Diseases; Ophthalmology; Trachoma;*, 5615, 5739, 5800, 5857, 5858, 5861, 5947, 5949, 5955, 5967, 6238, 6273, 6288

F

Family, *See also: Social Structure;*, 5705, 5719, 5743, 5906, 6042, 6044, 6049, 6091
Family Health, *See also: Maternal Child Health;*, 5669, 5743, 5814, 5848, 5898, 5901, 5906, 6187, 6222
Family Planning, *See also: Birth Control; Family Planning Programme;*, 5601, 5602, 5662, 5666, 5669, 5674, 5680, 5695, 5735, 5743, 5748, 5773, 5814, 5833, 5839, 5843, 5848, 5864, 5866, 5874, 5906, 5926, 5927, 5937, 5971, 5982, 5986, 6000, 6007, 6019, 6046, 6133, 6172, 6196, 6199, 6227, 6228
Family Planning Programme, *See also: Family Planning;*, 5773, 5874, 6004, 6006, 6199
FAO, *see also: International Organization;*, 5745, 6150
Federation of Cuban Women, 5628
Feldsher, *See also: Auxiliary Health Worker;*, 5619
Filariasis, *See also: Parasitic Diseases;*, 5739, 5815, 6179
Financial Aspect, *See also: Health Economics;*, 5601, 5622, 5627, 5641, 5644, 5648, 5652, 5653, 5659, 5667, 5680, 5682, 5686, 5687, 5690, 5704, 5705, 5707, 5737, 5742, 5756, 5760, 5779, 5784, 5832, 5836, 5842, 5845, 5846, 5851, 5856, 5861, 5862, 5890, 5897, 5903, 5919, 5931, 5957, 5967, 5969, 5976, 5983, 5987, 6003, 6006, 6010, 6013, 6026, 6028, 6033, 6034, 6036, 6037, 6038, 6040, 6041, 6075, 6098, 6149, 6222, 6259
First Aid, *See also: Emergency Medical Care;*, 5867, 5962
Flying Doctor Service, *See also: Mobile Health Unit;*, 5862
Folklore, *See also: Culture;*, 5871, 5873, 6050, 6059, 6065, 6071
Food, *See also: Diet; Hygiene; Nutrition;*, 5604, 5650, 5656, 5686, 5725, 5727, 5728, 5729, 5737, 5744, 5745, 5756, 5757, 5758, 5763, 5764, 5765, 5769, 5770, 5772, 5781, 5788, 5790, 5797, 5800, 5802, 5805, 5813, 5860, 5872, 5876, 5878, 5939, 5944, 5948, 5954, 6020, 6021, 6068, 6070, 6098, 6108, 6127, 6149, 6150, 6160, 6163, 6167, 6176, 6186, 6193, 6196, 6206, 6213, 6222, 6248, 6262, 6264, 6276, 6287, 6288, 6290, 6293
Food Production, *See also: Agricultural Sector;*, 5678, 5686, 5725, 5737, 5744, 5757, 5758, 5764, 5765, 5769, 5772, 5779, 5800, 5802, 5808, 5863, 5872, 5876, 5878, 5948, 6020, 6070, 6127, 6149, 6150, 6160, 6167, 6176, 6196, 6273

G

Gastroenteritis, *See also: Enteric Diseases;*, 5885, 6162, 6184, 6250
Geriatrics, 5606, 5611, 5640, 5690, 5823
Glaucoma, *See also: Eye Diseases;*, 5861
Goitre, *See also: Nutrition;*, 5742, 5763, 5817, 6204
Government, 5678, 5889, 6002, 6033, 6108
Government Policy, *See also: Planning, Development; Political Aspect;*, 5635, 5644, 5648, 5657, 5659, 5661, 5674, 5677, 5680, 5687, 5689, 5693, 5694, 5704, 5705, 5708, 5724, 5764, 5781, 5796, 5889, 5928, 5952, 5988, 6007, 6010, 6011, 6012, 6013, 6017, 6019, 6020, 6021, 6022, 6026, 6033, 6199
Government Project, *See also: Pilot Project;*, 5839, 6038, 6278
Guinea Worm, *See also: Parasitic Diseases;*, 6072
Gynaecology, *See also: Maternal Child Health; Obstetrics;*, 5735, 5918, 6297

H

Handbook, *See also: Teaching Aid;*, 5657, 5787, 5938, 5939, 5940, 5941, 5942, 5943, 5944, 5947, 5948, 5949, 5950, 5951, 5952, 5953, 5954, 5955, 5956, 5957, 5959, 5960, 5962, 5964, 5965, 5966, 5968, 5970
Handbook, Auxiliary, 5608, 5968
Handbook, Child Health, 5955, 5961, 5968, 5970
Handbook, Community Health, 5938, 5963
Handbook, Disease Control, 5608, 5787, 5938, 5939, 5940, 5942, 5943, 5956, 5959, 5960, 5965, 5966
Handbook, Environmental Health, 5608, 5946
Handbook, Family Planning, 5608
Handbook, First Aid, 5608, 5938, 5962
Handbook, Health Education, 5608, 5939, 5963, 5964
Handbook, Laboratory Technician, 5943
Handbook, Leprosy, 5947, 5953
Handbook, Maternal Child Health, 5608, 5938, 5939
Handbook, Midwife, 5608

Handbook, Nurse, 5608
Handbook, Nutrition, 5608, 5938, 5941, 5944, 5948
Handbook, Paramedic, 5947
Handbook, Physician, 5949, 5961
Handbook, Planning, 5694, 5952, 5967
Handbook, Rehabilitation, 5951
Handbook, Sanitation, 5939, 5954
Handbook, Teacher, 5608
Health Centre, *See also: Clinic; Dispensary; Hospital; Mobile Health Unit; Rural Health Post;*, 5601, 5633, 5638, 5640, 5642, 5643, 5648, 5653, 5654, 5673, 5681, 5831, 5832, 5849, 5851, 5854, 5900, 5994, 5997, 6004, 6005
Health Economics, *See also: Cost Measures; Cost-benefit Analysis; Costs and Cost Analysis; Direct Service Costs; Economic Development; Financial Aspect;*, 5618, 5649, 5659, 5680, 5685, 5704, 5705, 5707, 5708, 5784, 5811, 6010, 6033, 6037, 6038, 6127
Health Educator, *See also: HealthManpower;*, 5688, 5880, 5937
Health Extension Officer, *See also: Auxiliary Health Worker;*, 5715, 5904
Health Indicators, *See also: Epidemiology; Evaluation, Health; Health Status;*, 5670, 5759
Health Insurance, *See also: Social Security;*, 5652, 5699, 5843, 6040
Health Manpower, *See also: Administrator; Auxiliary Health Worker; Dental Manpower; Health Educator; Health Team; Medical Technologist; Mental Health Manpower; Midwife; Nurse; Nurse-midwife; Pharmacist; Physician; Sanitation Manpower; Social Worker; Teacher; Volunteer; X-ray Technician;*, 5601, 5609, 5614, 5615, 5617, 5618, 5620, 5621, 5622, 5624, 5625, 5626, 5630, 5632, 5633, 5638, 5639, 5644, 5646, 5648, 5649, 5659, 5664, 5665, 5666, 5669, 5672, 5676, 5686, 5700, 5795, 5824, 5827, 5832, 5851, 5854, 5951, 5952, 5960, 5967, 5973, 5975, 5984, 5987, 6003, 6015, 6026, 6027, 6028, 6032, 6225
Health Services, *See also: Administration, Health Services; Dental Services; Distribution, Health Services; Emergency Health Services; Evaluation, Health Services; Maternal Child Health Services; Mental Health Services; Nursing Services; Organization, Health Services; Planning, Health Services; Rehabilitation Services;*, 5601, 5615, 5626, 5629, 5630, 5631, 5632, 5633, 5634, 5635, 5636, 5637, 5638, 5638, 5639, 5640, 5642, 5643, 5644, 5646, 5647, 5649, 5652, 5653, 5654, 5655, 5657, 5659, 5662, 5664, 5665, 5666, 5667, 5669, 5670, 5671, 5672, 5673, 5674, 5675, 5676, 5678, 5679, 5680, 5681, 5684, 5686, 5687, 5688, 5689, 5690, 5692, 5694, 5695, 5696, 5698, 5699, 5701, 5702, 5703, 5705, 5709, 5713, 5757, 5762, 5821, 5835, 5838, 5839, 5847, 5849, 5853, 5854, 5897, 5905, 5925, 5952, 5963, 5983, 5987, 5988, 5989, 5990, 5991, 5992, 5999, 6000, 6003, 6005, 6006, 6007, 6009, 6010, 6011, 6012, 6013, 6015, 6016, 6017, 6018, 6019, 6022, 6023, 6025, 6031, 6033, 6038, 6040, 6041, 6043, 6045, 6046, 6048, 6053, 6057, 6060, 6062, 6064, 6066, 6097, 6224, 6249
Health Status, *See also: Health Indicators;*, 5606, 5662, 5670, 5952, 6069, 6240
Health Team, *See also: Health Manpower;*, 5621, 5643, 5651, 5840, 5847, 5862, 5912, 5918
Hilot, 5927, 5928
History of Health Services, *See also: Traditional Medicine;*, 5615, 5632, 5639, 5698, 5712, 5768, 5790, 5846, 5854, 5988, 5993, 5998, 6007, 6011, 6059, 6190
Home Visiting, *See also: Lady Health Visitor;*, 5651, 5881, 5894, 5919
Hookworm, *See also: Parasitic Diseases;*, 5750, 6087, 6095, 6117, 6170, 6189, 6260, 6270, 6294
Hospital, *See also: Health Centre;*, 5611, 5621, 5640, 5645, 5648, 5650, 5653, 5654, 5673, 5681, 5698, 5700, 5704, 5737, 5770, 5786, 5803, 5817, 5818, 5820, 5821, 5824, 5825, 5826, 5827, 5835, 5842, 5844, 5846, 5847, 5862, 5883, 5897, 5900, 5925, 5965, 5994, 5995, 5997, 6011, 6013, 6024, 6032, 6042, 6064, 6077, 6082, 6089, 6099, 6143, 6162, 6181, 6188, 6194, 6197, 6203, 6212, 6220, 6224, 6260, 6286
Hospital, Missionary, 5835, 5844
Hospital, Rural, 5633, 5648, 5681, 5700, 5704, 5817, 5820, 5824, 5826, 5842, 5847, 5862, 5883, 5900, 6224
Housing, *See also: Construction, Housing; Living Conditions;*, 5946, 5948, 5954, 6069, 6228
Hygiene, *See also: Food; Living Conditions; Sanitation;*, 5636, 5725, 5739, 5758, 5790, 5797, 5808, 5827, 5865, 5935, 5937, 5939, 5944, 5946, 5954, 5965, 5970, 5982, 6078, 6136, 6182

I

Immunization, *See also: Disease Control; Vaccination; Vaccination Programme;*, 5722, 5740, 5747, 5749, 5752, 5762, 5770, 5775, 5777, 5787, 5792, 5808, 5812, 5837, 5854, 5859, 5863, 5942, 5951, 5961, 5961, 6018, 6036, 6080, 6089, 6118, 6121, 6169, 6191, 6198, 6219, 6230, 6241, 6253
Infant, *See also: Child; Infant Feeding;*, 5604, 5650, 5658, 5728, 5743, 5744, 5777, 5778, 5780, 5788, 5803, 5816, 5826, 5852, 5881, 5889, 5926, 5950, 5958, 5961, 6035, 6036, 6047, 6051, 6052, 6065, 6069, 6078, 6080, 6083, 6084, 6090, 6107, 6111, 6114, 6116, 6119, 6125, 6127, 6128, 6135, 6140, 6159, 6160, 6165, 6168, 6171, 6175, 6192, 6194, 6198, 6200, 6202, 6203, 6206, 6211, 6218, 6224, 6225, 6227, 6228, 6234, 6235, 6240, 6241, 6262, 6266, 6277, 6282, 6284, 6286, 6287, 6289, 6290, 6299
Infant Feeding, *See also: Breast-feeding; Child Health; Infant;*, 5604, 5650, 5728, 5729, 5744, 5754, 5755, 5772, 5788, 5808, 5852, 5865, 5872, 5878, 5881, 5944, 5961, 5968, 5970, 6052, 6084, 6127, 6160, 6201, 6211, 6234, 6262, 6287, 6289, 6290, 6293

Infectious Diseases, *See also: Cholera; Diphtheria; Disease Control; Enteric Diseases; Epidemiology; Eye Diseases; Leprosy; Malaria; Measles; Parasitic Diseases; Pertussis; Poliomyelitis; Rabies; Respiratory Diseases; Skin Diseases; Smallpox; Tetanus; Tuberculosis; Typhoid Fever; Venereal Diseases; Yellow Fever;*, 5727, 5733, 5739, 5740, 5760, 5763, 5764, 5769, 5770, 5782, 5792, 5793, 5816, 5821, 5824, 5941, 5955, 5961, 5965, 5970, 6035, 6069, 6077, 6095, 6097, 6099, 6122, 6128, 6133, 6145, 6165, 6181, 6209, 6212, 6248, 6275, 6294, 6299, 6300
Information Service, *See also: Information System;*, 5644, 5679, 5692, 5693, 5695, 5752, 5877, 5969
Information System, *See also: Data Collection; Information Service;*, 5679, 5692, 5839, 5960, 6004, 6088, 6164, 6286
Inpatient Care, *See also: Health Centre;*, 5673, 5795, 5803, 5819, 5821, 5824, 5825, 5826, 5828, 5831, 5940, 5965, 5997, 6143, 6165, 6166
International Aid, *See also: International Cooperation;*, 5601, 5616, 5653, 5703, 5768, 5832, 5834, 5840, 5846, 5890
International Cooperation, *See also: International Aid; International Organization;*, 5623, 5624, 5645, 5646, 5650, 5661, 5679, 5687, 5694, 5703, 5721, 5724, 5741, 5757, 5790, 5810, 5847, 5890, 5913, 6046, 6190, 6264
International Organization, *See also: IPPF; UNICEF; Voluntary Organization; WHO;*, 5703
Intrauterine Device, *See aalso: Birth Control;*, 6199
IPPF, *see also: International Organization;*, 5986

J

Job Description, *See: specific health worker;*, 5603, 5610, 5615, 5619, 5621, 5622, 5628, 5642, 5691, 5700, 5748, 5834, 5836, 5846, 5850, 5859, 5880, 5883, 5896, 5911, 5916, 5917, 5918, 5919, 5921, 5922, 5925, 5926, 5927, 5928, 5930, 5932, 5933, 5963, 5974, 5976, 5978, 5979, 5981, 5982, 5983, 5985, 5986, 6023, 6030, 6046
Job Description, Auxiliary, 5603, 5619
Job Description, Community Health Aide, 5622
Job Description, Community Health Worker, 5846, 5850, 5916, 5963, 5981, 5985, 6005
Job Description, Dental Auxiliary, 5930, 5932
Job Description, Dental Hygienist, 5932
Job Description, Dentist, 5930, 5932
Job Description, Dispensary Attendant, 6023
Job Description, Health Educator, 5880
Job Description, Lady Health Visitor, 5834
Job Description, Medical Assistant, 5622, 5883, 5918, 5979
Job Description, Medical Officer, 5911
Job Description, Midwife, 5926
Job Description, Nurse, 5621, 5642, 5691, 5748, 5859, 5918, 5919, 5921, 5922, 5925, 6046
Job Description, Nurse Practitioner, 5622, 5974, 5978
Job Description, Nurse-midwife, 5986
Job Description, Ophthalmic Medical Assistant, 5615
Job Description, Pharmacist, 5621, 5983
Job Description, Physician, 5621, 5628, 5700, 5896, 5911, 6030
Job Description, Rural Health Promoter, 5836, 5917, 5930, 6046
Job Description, Sanitary Engineer, 5933
Job Description, Social Worker, 5976
Job Description, Teacher, 5610
Job Description, Traditional Birth Attendant, 5927, 5928, 5982

K

Kwashiorkor, *See also: Nutrition;*, 5604, 5729, 5730, 5763, 5772, 5941, 5970, 6098, 6118, 6127, 6140, 6148, 6207, 6212

L

Laboratory, *See also: Research Centre;*, 5605, 5608, 5627, 5768, 5771, 5775, 5780, 5782, 5794, 5795, 5812, 5824, 5931, 5943, 5965, 6184, 6184, 6188, 6260
Laboratory Technician, *See also: HealthManpower;*, 5619, 5943, 5975, 6028
Lady Health Visitor, *See also: Auxiliary Health Worker; Home Visiting;*, 5834, 5926
Language, *See also: Culture;*, 5619, 5786, 5787, 5950
Legal Aspect, 5756
Legislation, *See also: Legislation, Health;*, 5699, 5708, 5724, 5765, 5902, 5903, 5903, 5926, 6002, 6021, 6199
Legislation, Health, *See also: Legislation;*, 5724, 5765, 5902, 5926, 5946, 6199
Leishmaniasis, *See also: Parasitic Diseases;*, 5734, 5736, 5771, 6153, 6256, 6263
Leprosy, *See also: Infectious Diseases;*, 5607, 5627, 5641, 5669, 5740, 5789, 5799, 5844, 5845, 5857, 5875, 5947, 5953, 6037, 6153, 6213, 6238, 6255, 6258, 6259, 6291
Life Expectancy, *See also: Demography; Mortality;*, 5950
Living Conditions, *See also: Environmental Health; Housing; Hygiene; Slums;*, 5626, 5636, 5743, 5796, 6069, 6141
Local Level, 5732

M

Malaria, *See also: Infectious Diseases;*, 5605, 5607, 5632, 5655, 5669, 5739, 5740, 5763, 5791, 5793, 5998, 6011, 6083, 6094, 6095, 6099, 6138, 6209, 6226, 6231, 6248, 6250, 6251, 6252, 6263, 6271, 6294
Marasmus, *See also: Nutrition;*, 5604, 5729, 5730, 5763, 5941, 5970, 6118, 6127, 6162, 6207, 6212
Masai, *See also: Tribes;*, 6261
Mass Campaign, 5641, 5677, 5782, 5791, 5799, 5841, 5892, 5939, 5993, 6142, 6216, 6231, 6263, 6272
Mass Campaign, Disease Control, 5641, 5782, 5791, 5799, 5841, 5892, 5993, 6094, 6142, 6216, 6231, 6263, 6272

Mass Media, *See also: Bibliography; Communications; Periodical; Radio Communications;*, 5664, 5677, 5866, 5869, 5871, 5873, 5877, 5878, 5991, 5992
Maternal Child Health, *See also: Antenatal Care; Child Health; Clinic, Maternal Child Health; Family Health; Gynaecology; Infant; Maternal Child Health Services; Obstetrics; Postpartum Care;*, 5636, 5681, 5728, 5735, 5748, 5755, 5759, 5770, 5788, 5805, 5818, 5821, 5829, 5833, 5834, 5838, 5843, 5852, 5856, 5894, 5906, 5916, 5938, 5939, 5942, 5968, 5970, 6051, 6065, 6107, 6135, 6163, 6168, 6192, 6200, 6203, 6208, 6235, 6240, 6266
Maternal Child Health Services, *See also: Health Services; Maternal Child Health;*, 5640, 5653, 5658, 5704, 5710, 5770, 5833, 5834, 5852, 5926, 5977, 6192, 6279
Measles, *See also: Infectious Diseases;*, 5650, 5722, 5741, 5747, 5752, 5777, 5792, 5888, 6043, 6060, 6080, 6099, 6110, 6166, 6174, 6200, 6212, 6219, 6228, 6253
Medex, *See also: Auxiliary Health Worker;*, 6041
Medical Assistant, *See also: Auxiliary Health Worker;*, 5619, 5622, 5699, 5883, 5900, 5918, 5979, 5980, 6006, 6032, 6034, 6038, 6041, 6066
Medical Officer, *See also: Physician;*, 5911
Medical Records, *See also: Epidemiology; Medical Records Maintenance;*, 5839, 5943, 5989, 5995, 6001, 6077, 6088, 6089, 6126, 6177, 6188, 6194, 6202, 6224, 6243, 6257
Medical Records Maintenance, *See also: Medical Records;*, 5839, 5943, 5953, 5989, 5993, 5995, 6077, 6088, 6177, 6202, 6243
Medical Technologist, *See also: Health Manpower;*, 6028
Medicinal Plant, *See also: Drugs; Traditional Medicine;*, 5709, 5712, 5714, 5717, 5944, 5970, 6011, 6043, 6048, 6071
Mental Health, 5606, 5640, 5648, 5693, 5709, 5711, 5716, 5718, 5719, 5720, 5797, 5828, 5921, 5963, 6002, 6014, 6024, 6049, 6050, 6057, 6058, 6061, 6069, 6082, 6177, 6214
Mental Health Manpower, *See also: Nurse, Mental Health;*, 5693
Mental Health Services, *See also: Psychiatry;*, 5648, 5693, 5718, 5828, 6002, 6024, 6057
Mental Retardation, *See also: Nutrition;*, 5783, 5961, 6014, 6228, 6245, 6292
Methodology, 5606, 5611, 5617, 5620, 5647, 5654, 5661, 5662, 5665, 5668, 5670, 5671, 5672, 5678, 5682, 5683, 5684, 5730, 5736, 5756, 5758, 5759, 5760, 5771, 5777, 5787, 5793, 5826, 5866, 5879, 5893, 5894, 5915, 5958, 5972, 5980, 5981, 5984, 5989, 5990, 6002, 6008, 6017, 6018, 6020, 6041, 6054, 6055, 6058, 6074, 6075, 6076, 6084, 6087, 6092, 6111, 6115, 6120, 6129, 6134, 6135, 6136, 6137, 6146, 6147, 6151, 6154, 6158, 6159, 6168, 6170, 6171, 6172, 6174, 6176, 6179, 6183, 6189, 6194, 6208, 6216, 6217, 6221, 6223, 6235, 6236, 6239, 6249, 6251, 6264, 6266, 6270, 6271, 6273, 6276, 6277, 6282, 6287, 6289, 6292, 6300
Methodology, Evaluation, 5670, 5672, 5683, 5684, 5730, 5759, 5785, 5787, 5826, 5866, 5879, 5893, 5894, 5915, 5958, 5972, 5980, 5981, 5989, 5990, 6002, 6041, 6054, 6058, 6074, 6075, 6084, 6087, 6092, 6120, 6129, 6135, 6137, 6146, 6147, 6151, 6154, 6158, 6159, 6168, 6170, 6171, 6172, 6174, 6176, 6183, 6194, 6208, 6216, 6221, 6235, 6239, 6249, 6251, 6264, 6266, 6273, 6276, 6277, 6282, 6287, 6289, 6292
Methodology, Planning, 5611, 5617, 5620, 5647, 5654, 5661, 5662, 5665, 5668, 5670, 5671, 5672, 5673, 5678, 5682, 5756, 5760, 5967, 5981, 6017, 6018, 6020
Methodology, Research, 5736, 6264
Methodology, Survey, 5606, 5684, 5758, 5777, 5793, 6008, 6055, 6076, 6111, 6115, 6134, 6179, 6189, 6217, 6223, 6236, 6270, 6271, 6289, 6300
Midwife, *See also: Auxiliary, Midwife; Traditional Birth Attendant;*, 5613, 5829, 5900, 5904, 5926, 5973
Migration, *See also: Brain Drain; Demography; Urbanization;*, 5624, 5697, 5719, 5738, 5763, 5950, 6027, 6061, 6091, 6102, 6108, 6116, 6179, 6289
Military, 5605, 5980, 6012, 6087
Minority Group, *See also: Aborigines; Eskimos; Nomads; Tribes;*, 5718, 5983, 6028, 6033, 6053, 6055, 6056, 6067
Missionary, 5635, 5833, 5844, 5847, 5963
Mobile Eye Unit, 5861
Mobile Health Unit, *See also: Flying Doctor Service; Health Centre;*, 5666, 5673, 5844, 5987, 6081
Mobile Vaccination Unit, 5841, 6080
Morbidity, *See also: Evaluation, Health; Statistical Data;*, 5606, 5658, 5670, 5734, 5789, 5821, 5950, 6035, 6069, 6073, 6082, 6089, 6110, 6117, 6121, 6131, 6138, 6144, 6178, 6197, 6201, 6203, 6225, 6240, 6250, 6253, 6255, 6260, 6261, 6271, 6275, 6300
Mortality, *See also: Demography; Life Expectancy; Statistical Data;*, 5604, 5606, 5727, 5734, 5738, 5743, 5747, 5795, 5831, 5862, 5889, 5926, 5950, 6047, 6052, 6056, 6069, 6077, 6078, 6088, 6099, 6110, 6114, 6116, 6121, 6122, 6125, 6131, 6140, 6143, 6165, 6166, 6175, 6181, 6192, 6197, 6202, 6206, 6220, 6224, 6225, 6227, 6240, 6241, 6242, 6243, 6248, 6250, 6275, 6279, 6280, 6286, 6288, 6295, 6296
Mortality, Child, 5606, 5634, 5734, 5747, 5831, 6035, 6078, 6099, 6116, 6122, 6125, 6140, 6143, 6165, 6166, 6175, 6225, 6248, 6279, 6280, 6288, 6295
Mortality, Infant, 5604, 5634, 5658, 5743, 5889, 5926, 5950, 6035, 6047, 6052, 6069, 6078, 6114, 6116, 6127, 6140, 6165, 6172, 6175, 6192, 6202, 6206, 6224, 6225, 6227, 6240, 6241, 6250, 6286, 6289
Mortality, Maternal, 5743, 5950, 6192, 6220

N

National Health Plan, *See also: Planning, Health Services; Planning, National;*, 5660, 5661, 5666, 5674, 5685, 5696, 5741, 6003, 6011, 6019

National Plan, *See also: Planning, National;*, 5613, 5633, 5781
Nomads, *See also: Minority Group;*, 6209, 6261
Nurse, *See also: Auxiliary, Nurse; Health Manpower; Nurse Practitioner; Nurse, Mental Health;*, 5611, 5613, 5620, 5621, 5623, 5624, 5642, 5685, 5691, 5748, 5848, 5859, 5900, 5918, 5919, 5920, 5921, 5922, 5923, 5924, 5925, 5973, 5975, 5995, 6026, 6027, 6028, 6032, 6046
Nurse Practitioner, *See also: Nurse;*, 5622, 5699, 5702, 5921, 5974, 5978, 6038
Nurse, Mental Health, *See also: Nurse;*, 5921
Nurse-midwife, *See also: Auxiliary, Nurse-midwife; Health Manpower;*, 5986
Nursing Services, *See also: Health Services;*, 5611, 5669, 5853, 5919, 5920, 5922, 5923, 5925
Nutrition, *See also: Anaemia; Anthropometric Measurement; Diet; Food; Goitre; Infant Feeding; Kwashiorkor; Marasmus; Mental Retardation; Nutrition Programme; Vitamin Deficiency;*, 5601, 5604, 5636, 5653, 5658, 5662, 5706, 5715, 5726, 5727, 5728, 5729, 5730, 5731, 5732, 5737, 5743, 5744, 5745, 5746, 5754, 5755, 5756, 5757, 5760, 5762, 5763, 5764, 5765, 5766, 5769, 5770, 5772, 5778, 5779, 5781, 5783, 5788, 5790, 5795, 5797, 5800, 5802, 5805, 5806, 5808, 5813, 5814, 5816, 5824, 5834, 5843, 5852, 5856, 5865, 5866, 5872, 5876, 5877, 5878, 5881, 5882, 5893, 5937, 5938, 5939, 5941, 5944, 5948, 5955, 5958, 5967, 5968, 5970, 5975, 6007, 6020, 6021, 6035, 6052, 6054, 6069, 6070, 6074, 6075, 6078, 6090, 6091, 6095, 6096, 6098, 6099, 6104, 6106, 6107, 6108, 6112, 6118, 6123, 6124, 6125, 6126, 6127, 6129, 6132, 6135, 6136, 6137, 6140, 6141, 6146, 6147, 6148, 6150, 6154, 6158, 6160, 6162, 6163, 6165, 6166, 6167, 6168, 6170, 6171, 6172, 6173, 6176, 6180, 6183, 6191, 6193, 6194, 6196, 6201, 6205, 6206, 6207, 6209, 6211, 6212, 6222, 6234, 6235, 6239, 6240, 6241, 6245, 6248, 6250, 6257, 6262, 6264, 6265, 6266, 6267, 6268, 6273, 6278, 6279, 6284, 6287, 6288, 6289, 6290, 6292, 6293
Nutrition Programme, *See also: Nutrition;*, 5650, 5695, 5727, 5730, 5745, 5754, 5756, 5759, 5764, 5769, 5772, 5779, 5781, 5788, 5790, 5802, 5805, 5813, 5876, 5941, 6006, 6035, 6098, 6108, 6125, 6137, 6149, 6176, 6191, 6193, 6196, 6201, 6206, 6234, 6257, 6262, 6267, 6276, 6278, 6288, 6292

O

Obstetrics, *See also: Gynaecology; Maternal Child Health; Parturition;*, 5658, 5704, 5735, 5821, 5826, 5900, 5918, 5926, 6192
Occupational Health, 5636, 5745, 5946, 5954, 6010, 6149, 6170
Onchocerciasis, *See also: Parasitic Diseases;*, 5739, 5763, 5767, 5793, 5801, 5861, 5967, 6134, 6145, 6153, 6247
Ophthalmic Medical Assistant, *See also: Auxiliary Health Worker;*, 5615
Ophthalmology, *See also: Eye Diseases;*, 5615, 5800, 5861, 5949
Oral Contraceptive, *See also: Birth Control;*, 5778, 6199
Oral Rehydration, *See also: disease Control;*, 5831, 5885, 5892, 5959, 6119, 6254, 6280
Organization, *See: specific service or activity;*, 5609, 5620, 5626, 5627, 5628, 5629, 5630, 5631, 5632, 5633, 5634, 5635, 5637, 5638, 5639, 5640, 5641, 5642, 5643, 5644, 5646, 5647, 5648, 5649, 5650, 5651, 5652, 5654, 5655, 5656, 5657, 5659, 5666, 5676, 5680, 5681, 5685, 5688, 5689, 5701, 5702, 5709, 5713, 5733, 5738, 5748, 5757, 5762, 5791, 5794, 5795, 5809, 5820, 5832, 5833, 5834, 5835, 5837, 5839, 5845, 5849, 5850, 5851, 5852, 5853, 5854, 5855, 5856, 5867, 5876, 5897, 5905, 5919, 5922, 5931, 5952, 5960, 5987, 5988, 5991, 5992, 5993, 5994, 5996, 5998, 6000, 6001, 6002, 6005, 6007, 6009, 6010, 6011, 6012, 6013, 6015, 6016, 6019, 6048, 6086, 6097, 6226
Organization, Clinic, 5628
Organization, Dental Services, 5651, 5931
Organization, Disease Control, 5627, 5632, 5655, 5733, 5738, 5791, 5795, 5809, 5820, 5837, 5850, 5855, 5967, 5993, 5998, 6086, 6226
Organization, Emergency Health Services, 5650
Organization, Environmental Health Services, 5656, 5946
Organization, Health Centre, 5642, 5654, 5832, 5851, 5854, 5994
Organization, Health Education, 5867
Organization, Health Manpower, 5609, 5620
Organization, Health Services, 5626, 5629, 5630, 5631, 5632, 5633, 5634, 5635, 5636, 5637, 5638, 5639, 5640, 5642, 5643, 5644, 5646, 5647, 5649, 5652, 5654, 5655, 5657, 5659, 5666, 5669, 5676, 5680, 5681, 5685, 5688, 5689, 5701, 5702, 5709, 5713, 5757, 5762, 5835, 5839, 5843, 5849, 5853, 5897, 5905, 5952, 5987, 5988, 5991, 5992, 5999, 6000, 6007, 6009, 6010, 6011, 6012, 6013, 6015, 6016, 6019, 6043, 6048, 6097
Organization, Mass Campaign, 5641
Organization, Maternal Child Health Services, 5833, 5834, 5852, 5856
Organization, Mental Health Services, 5648, 5693, 6002
Organization, Nursing Services, 5919, 5922
Organization, Nutrition Programme, 5876
Organization, Project, 5748
Organization, Rehabilitation Services, 5845
Organization, Sanitation Services, 5996
Organization, Training, 5613, 5912, 6015
Organization, Tuberculosis Programme, 5794, 5960
Organization, Vaccination Programme, 6001
Outpatient Care, *See also: Clinic, Outpatient;*, 5636, 5642, 5657, 5673, 5684, 5839, 5844, 5846, 5847, 5851, 5859, 5884, 5991, 5994, 5997, 6064
Outpatient Care, Rural, 5636, 5642, 6006

P

Paramedic, *See also: Auxiliary Health Worker;*, 5619, 5832, 5914

Parasitic Diseases, *See also: Ascariasis; Guinea Worm; Filariasis; Hookworm; Infectious Diseases; Leishmaniasis; Onchocerciasis; Schistosomiasis; Trypanosomiasis;*, 5726, 5733, 5736, 5739, 5750, 5760, 5771, 5776, 5780, 5786, 5793, 5806, 5815, 5824, 5843, 5872, 5955, 5956, 5961, 5970, 6087, 6093, 6095, 6097, 6099, 6115, 6117, 6118, 6145, 6151, 6153, 6157, 6165, 6173, 6182, 6184, 6188, 6189, 6210, 6236, 6237, 6248, 6250, 6260, 6263, 6270, 6294

Parturition, *See also: Obstetrics; Pregnancy;*, 5704, 5818, 5834, 5886, 5900, 5927, 5982, 6048, 6192, 6208, 6220, 6224, 6240, 6250

Pediatrics, *See also: Child Health;*, 5629, 5824, 5901, 5908, 5909, 5910, 5955, 5961, 5995, 6016

Periodical, *See also: Mass Media;*, 5607, 5865, 5899, 5948, 6164

Pertussis, *See also: Infectious Diseases;*, 5722, 5741, 5752, 6080, 6099, 6110, 6169, 6198, 6219, 6250

Pest Control, *See also: Disease Control;*, 5605, 5753, 5775, 5782, 5791, 5865, 5946, 5954, 5998, 6073, 6086, 6094, 6097, 6138, 6156, 6216, 6228, 6231, 6252, 6263

Pharmacist, *See also: Health Manpower;*, 5620, 5621, 5659, 5685, 5983, 6032, 6085

Pharmacy, *See also: Drugs;*, 5999, 6085

Physical Examination, *See also: Evaluation, Health;*, 5767, 5958, 6063, 6133

Physician, *See also: Health Manpower; Medical Officer;*, 5612, 5616, 5617, 5620, 5621, 5623, 5624, 5626, 5628, 5636, 5659, 5669, 5681, 5685, 5697, 5699, 5700, 5701, 5703, 5830, 5839, 5848, 5895, 5896, 5897, 5898, 5899, 5901, 5902, 5903, 5905, 5906, 5907, 5908, 5909, 5910, 5911, 5913, 5917, 5949, 5961, 5972, 5973, 5975, 5980, 5989, 5994, 5995, 6007, 6011, 6013, 6015, 6016, 6019, 6022, 6025, 6026, 6027, 6029, 6030, 6032, 6041, 6050, 6053, 6057, 6066, 6126

Physiotherapy, *See also: Rehabilitation Services;*, 5936, 5947, 5951, 6081

Pilot Project, *See also: Government Project;*, 5611, 5646, 5651, 5671, 5721, 5748, 5759, 5779, 5836, 5838, 5840, 5841, 5842, 5853, 5854, 5859, 5864, 5871, 5875, 5892, 5900, 5928, 5948, 5976, 5978, 5981, 5983, 5986, 5988, 6004, 6006, 6018, 6264, 6276

Planning, *See: specific service or activity;*, 5609, 5610, 5611, 5612, 5613, 5614, 5615, 5617, 5618, 5620, 5621, 5622, 5623, 5627, 5631, 5633, 5634, 5635, 5637, 5640, 5643, 5644, 5646, 5647, 5648, 5651, 5654, 5656, 5657, 5658, 5659, 5660, 5661, 5662, 5663, 5664, 5665, 5666, 5667, 5668, 5670, 5671, 5672, 5673, 5674, 5675, 5676, 5677, 5678, 5679, 5680, 5681, 5682, 5683, 5684, 5685, 5686, 5687, 5688, 5689, 5690, 5691, 5692, 5694, 5695, 5696, 5700, 5701, 5702, 5703, 5705, 5706, 5707, 5709, 5713, 5714, 5718, 5720, 5721, 5722, 5723, 5724, 5725, 5726, 5727, 5728, 5729, 5731, 5732, 5733, 5738, 5739, 5740, 5741, 5742, 5743, 5744, 5745, 5747, 5749, 5750, 5751, 5752, 5753, 5754, 5756, 5758, 5759, 5760, 5762, 5764, 5767, 5769, 5770, 5771, 5772, 5773, 5774, 5776, 5777, 5779, 5781, 5784, 5785, 5786, 5789, 5791, 5792, 5794, 5796, 5797, 5798, 5799, 5800, 5801, 5802, 5803, 5804, 5805, 5806, 5808, 5811, 5813, 5814, 5820, 5821, 5833, 5839, 5868, 5872, 5874, 5875, 5882, 5887, 5888, 5889, 5891, 5901, 5902, 5903, 5905, 5906, 5911, 5912, 5922, 5924, 5937, 5938, 5942, 5952, 5960, 5963, 5981, 5984, 5988, 5997, 6001, 6002, 6003, 6004, 6005, 6009, 6010, 6017, 6018, 6019, 6020, 6021, 6022, 6026, 6027, 6037, 6072, 6073, 6081, 6089, 6100, 6109, 6110, 6121, 6155, 6165, 6176, 6179, 6190, 6198, 6203, 6218, 6258, 6260, 6278, 6292, 6297

Planning, Child Health, 5743

Planning, Dental Services, 5651

Planning, Development, *See also: Community Development; Economic Development; Government Policy; Rural Development; Social Development; Socioeconomic Development;*, 5640, 5653, 5660, 5661, 5668, 5677, 5686, 5688, 5689, 5703, 5732, 5764, 5796, 5887, 5905, 6017, 6020, 6021

Planning, Disease Control, 5627, 5672, 5682, 5720, 5721, 5723, 5724, 5725, 5726, 5727, 5733, 5738, 5739, 5740, 5742, 5747, 5749, 5750, 5751, 5752, 5753, 5756, 5758, 5760, 5767, 5771, 5774, 5776, 5777, 5784, 5785, 5786, 5789, 5791, 5792, 5794, 5798, 5799, 5800, 5801, 5803, 5806, 5811, 5820, 5888, 5889, 5891, 5942, 5967, 6037, 6073, 6100, 6121, 6165, 6179, 6190, 6218, 6228, 6258, 6260, 6297

Planning, Emergency Health Services, 5727

Planning, Environmental Health Services, 5656

Planning, Evaluation, 5683

Planning, Family Planning Programme, 5669, 5773, 5874, 6004

Planning, Health Centre, 5633, 5643, 5654, 5673

Planning, Health Education, 5663, 5688, 5797, 5804, 5868, 5875, 5882, 5937, 6072

Planning, Health Manpower, 5609, 5615, 5617, 5618, 5620, 5621, 5622, 5624, 5633, 5644, 5665, 5676, 5686, 5700, 6026, 6027

Planning, Health Services, 5615, 5631, 5633, 5634, 5635, 5637, 5643, 5646, 5647, 5653, 5654, 5657, 5660, 5662, 5664, 5665, 5666, 5667, 5669, 5670, 5671, 5672, 5673, 5674, 5675, 5676, 5678, 5679, 5680, 5681, 5686, 5687, 5689, 5690, 5692, 5694, 5695, 5696, 5701, 5702, 5705, 5709, 5713, 5762, 5821, 5839, 5846, 5905, 5952, 5963, 5987, 5988, 6005, 6009, 6010, 6017, 6018, 6019, 6022, 6033

Planning, Hospital, 5633, 5997

Planning, Immunization, 5752

Planning, Mass Campaign, 5791, 5799

Planning, Maternal Child Health, 6203

Planning, Maternal Child Health Services, 5658, 5704, 5770, 5833

Planning, Mental Health Services, 5648, 5693, 5718

Planning, National, *See also: National Health Plan; National Plan;*, 5618, 5659, 5660, 5661, 5666, 5673, 5674, 5678, 5680, 5685, 5689, 5694, 5696, 5704, 5707, 5708, 5769, 5781, 5808, 5967, 6017, 6020, 6021, 6022

Planning, Nursing Services, 5611

Planning, Nutrition, 5728, 5729, 5731, 5744, 5745, 5769, 5772, 5781, 5808, 5872, 6020
Planning, Nutrition Education, 5814
Planning, Nutrition Programme, 5727, 5754, 5756, 5759, 5764, 5769, 5779, 5781, 5802, 5805, 5813, 6176, 6278, 6292
Planning, Project, 5671, 5719, 5938, 5981, 6003, 6018
Planning, Regional, 5675, 5694, 5967
Planning, Rehabilitation Services, 6081
Planning, Survey, 5684
Planning, Training, 5610, 5612, 5613, 5614, 5623, 5624, 5659, 5664, 5666, 5680, 5691, 5901, 5902, 5903, 5906, 5911, 5912, 5922, 5924, 5932, 5937, 5981, 5984
Planning, Tuberculosis Programme, 5960
Planning, Vaccination Programme, 5722, 5741, 5747, 5777, 5792, 6001, 6089, 6109, 6110, 6155, 6198
Planning, Water Supply, 5706
Poisons, *See also: Emergency Medical Care;*, 5792, 5824, 5955, 6228
Poliomyelitis, *See also: Infectious Diseases;*, 5722, 5739, 5741, 5752, 5774, 5792, 5841, 5888, 5936, 5951, 6080, 6081, 6089, 6109, 6110, 6111, 6155, 6169, 6178, 6218, 6219, 6244, 6295
Political Aspect, *See also: Government Policy; Socialism;*, 5619, 5626, 5635, 5639, 5652, 5660, 5661, 5698, 5724, 5760, 5895, 5905, 5988, 6000, 6010, 6021, 6033
Population, *See also: Demography;*, 5627, 5675, 5815, 5950, 6007, 6134, 6150
Population Increase, *See also: Demography;*, 5950, 6000, 6150
Postpartum Care, *See also: Maternal Child Health;*, 5955, 6192
Poverty, *See also: Slums;*, 5699, 5702, 5705, 5706, 5766, 5769, 5987, 6000, 6021, 6046, 6107, 6153
Pregnancy, *See also: Antenatal Care; Obstetrics; Parturition;*, 5731, 5759, 5778, 5880, 5894, 5942, 5945, 6065, 6090, 6107, 6160, 6193, 6200, 6202, 6206, 6208, 6220, 6222, 6235, 6240, 6250, 6251, 6298
Preventive Medicine, 5627, 5639, 5657, 5663, 5670, 5681, 5762, 5799, 5800, 5836, 5838, 5848, 5866, 5867, 5889, 5942, 5953, 5964, 5964, 6067, 6100, 6114, 6133, 6238
Primary Care, 5603, 5609, 5634, 5636, 5654, 5660, 5661, 5663, 5664, 5665, 5687, 5689, 5691, 5694, 5721, 5853, 5855, 5922, 5952, 5976, 5978, 5979, 6172
Prosthesis, *See also: Rehabilitation;*, 5936, 5951, 6081
Psychiatry, *See also: Mental Health Services;*, 5711, 5720, 5828, 6057, 6061, 6177
Psychological Aspect, 5711, 5716, 5718, 5719, 5788, 5804, 5945, 6042, 6049, 6061

Q

Questionnaire, *See also: Survey;*, 5704, 5745, 5877, 5974, 5975, 5985, 5986, 5990, 6030, 6053, 6091, 6126, 6149, 6172, 6173, 6175, 6219

R

Rabies, *See also: Infectious Diseases;*, 5733, 5810, 6099
Radio Communications, *See also: Mass Media;*, 5663, 5862, 5877, 5880
Radiology, 5673, 5951, 6144
Refugees, 5757
Rehabilitation, *See also: Disaabled; Prosthesis;*, 5705, 5845, 5936, 5940, 5947, 5951, 5953, 6081
Rehabilitation Services, *See also: Health Services; Physiotherapy;*, 5845, 6081
Research, *See also: Methodology, Research; Statistical Analysis; Survey;*, 5605, 5607, 5645, 5659, 5660, 5683, 5695, 5699, 5712, 5714, 5735, 5736, 5743, 5752, 5753, 5754, 5758, 5766, 5768, 5775, 5776, 5778, 5783, 5793, 5812, 5843, 5866, 5905, 5913, 5922, 5931, 5992, 5994, 6004, 6007, 6035, 6036, 6037, 6071, 6090, 6097, 6160, 6226, 6229, 6231, 6232, 6249, 6259, 6264, 6269, 6276, 6284
Research Centre, *See also: Laboratory;*, 5607, 5645, 5649, 5714, 5768, 5913, 5934
Research, Disease Control, 5605, 5607, 5645, 5712, 5752, 5753, 5758, 5768, 5775, 5812, 5913, 6036, 6037, 6097, 6226, 6229, 6231, 6259, 6273
Research, Health Education, 5683
Research, Health Services, 6249
Research, Nutrition, 5754, 5766, 5778, 5783, 6035, 6090, 6160, 6276, 6284
Respiratory Diseases, *See also: Infectious Diseases;*, 5812, 5884, 6054
Rural Area, 5626, 5633, 5642, 5643, 5648, 5654, 5655, 5656, 5659, 5675, 5680, 5681, 5699, 5700, 5701, 5702, 5704, 5710, 5720, 5725, 5732, 5738, 5748, 5754, 5770, 5779, 5781, 5796, 5808, 5814, 5815, 5817, 5820, 5824, 5826, 5829, 5832, 5834, 5837, 5839, 5841, 5842, 5844, 5847, 5850, 5852, 5853, 5859, 5861, 5862, 5863, 5867, 5868, 5875, 5876, 5878, 5883, 5894, 5896, 5897, 5900, 5902, 5903, 5918, 5921, 5925, 5936, 5948, 5962, 5973, 5976, 5977, 5979, 5988, 5990, 5991, 5992, 6002, 6005, 6009, 6023, 6024, 6025, 6028, 6031, 6034, 6038, 6042, 6044, 6045, 6053, 6057, 6062, 6066, 6067, 6068, 6069, 6081, 6083, 6085, 6089, 6091, 6092, 6102, 6103, 6104, 6105, 6112, 6118, 6123, 6131, 6132, 6134, 6147, 6150, 6164, 6169, 6170, 6171, 6175, 6178, 6182, 6185, 6189, 6195, 6197, 6204, 6215, 6217, 6218, 6224, 6232, 6236, 6237, 6239, 6247, 6250, 6252, 6255, 6263, 6266, 6271, 6273, 6279, 6294, 6298
Rural Development, *See also: Planning, Development;*, 5633, 5686, 5715, 5732, 5764, 5779, 5796, 5814, 5833, 5948, 5963
Rural Health Post, *See also: Health Centre;*, 5835, 5990
Rural Health Promoter, *See also: Auxiliary Health Worker;*, 5836, 5840, 5917, 5930, 6046

S

Sanitary Engineer, *See also: Sanitation Manpower;*, 5933

Sanitary Facilities, *See also: Construction, Sanitary Facilities; Sanitation;*, 5863, 5891, 5935, 5946, 5990, 6117, 6272
Sanitation, *See also: Environmental Health; Hygiene; Sanitary Facilities; Waste Disposal;*, 5656, 5724, 5751, 5843, 5863, 5865, 5891, 5935, 5939, 5946, 5954, 6172, 6228, 6261
Sanitation Manpower, *See also: Auxiliary, Sanitation; Sanitary Engineer; Sanitary Inspector;*, 5935, 5954
Sanitation Programme, 6261, 6264
Sanitation Services, 5838, 5935, 5996
Scabies, *See also: Skin Diseases;*, 5780, 6031, 6115, 6153
Schistosomiasis, *See also: Parasitic Diseases;*, 5607, 5739, 5753, 5786, 5793, 5891, 6073, 6145, 6153, 6185, 6188, 6216, 6217, 6246, 6271, 6281
School, *See also: Training Centre; University;*, 5612, 5680, 5685, 5737, 5790, 5804, 5897, 5899, 5902, 5903, 5906, 5911, 5912, 5929, 6136, 6137, 6258, 6265
School Health, *See also: Child; Student; Teacher;*, 5636, 5640, 5666, 5790, 5804, 5838, 5840, 5954, 6001, 6136, 6180, 6182
School, Dental, 5929
School, Medical, 5612, 5633, 5680, 5685, 5897, 5899, 5902, 5903, 5905, 5906, 5911, 5912
School, Public Health, 5911
Screening, *See also: Diagnosis;*, 5615, 5794, 5811, 5842, 5858, 5861, 5883, 6081, 6092, 6130, 6133, 6217, 6255, 6268, 6297
Self-care, 5657, 5840, 5884
Skin Diseases, *See also: Dermatology; Infectious Diseases; Scabies; Yaws;*, 5629, 5739, 5767, 5780, 5801, 5940, 5955, 5961, 6054, 6076, 6153, 6157
Slums, *See also: Living Conditions; Poverty; Urbanization;*, 6207
Smallpox, *See also: Infectious Diseases;*, 5669, 5733, 5792, 5841, 5888, 5993, 6043, 6080, 6169, 6190, 6219, 6283
Social and Cultural Anthropology, *See also: Culture;*, 5713, 5923, 6059, 6172
Social Aspect, 5641, 5660, 5661, 5667, 5718, 5729, 5743, 5748, 5760, 5773, 5790, 5796, 5905, 5910, 6017, 6021, 6052, 6061, 6064, 6066, 6070, 6107, 6123, 6199, 6245
Social Change, *See also: Social Development;*, 5639, 5687, 5688, 5711, 5719, 5796, 5882, 6021, 6042, 6059, 6091
Social Development, *See also: Planning, Development; Social Change;*, 5719
Social Participation, *See also: Community Development;*, 5621, 5628, 5631, 5657, 5660, 5663, 5666, 5674, 5676, 5688, 5689, 5701, 5706, 5715, 5732, 5773, 5787, 5796, 5831, 5836, 5837, 5839, 5840, 5842, 5849, 5850, 5851, 5853, 5855, 5863, 5864, 5874, 5882, 5884, 5891, 5892, 5917, 5952, 5967, 6005, 6009, 6016, 6019, 6045, 6055, 6097
Social Sciences, 5660
Social Security, *See also: Health Insurance;*, 5690, 5707, 5721, 6010, 6012, 6013, 6133
Social Services, *See also: Child Care;*, 5670, 5690, 5705, 5719, 5796, 5854, 6225
Social Structure, *See also: Family; Women;*, 5715, 5796, 5973, 6012, 6021, 6061, 6214
Social Theory, 5882
Social Worker, *See also: Health Manpower;*, 5613, 5636, 5881, 5976
Socialism, *See also: Political Aspect;*, 5619, 5652, 5849
Socioeconomic Aspect, 5677, 5705, 5729, 5731, 5754, 5766, 5783, 5785, 5805, 5808, 5855, 5866, 6031, 6045, 6051, 6052, 6054, 6065, 6066, 6096, 6107, 6116, 6123, 6132, 6146, 6163, 6166, 6172, 6173, 6200, 6201, 6214, 6219, 6224, 6239, 6257, 6265, 6266, 6267, 6273, 6282, 6300
Socioeconomic Development, *See also: Economic Development; Planning, Development;*, 5637, 5686, 5728, 5807, 6017, 6021
Sociology, 5882
Statistical Analysis, *See also: Research; Statistical Data;*, 5764, 5893, 5950, 6029, 6120, 6140, 6183, 6202, 6241, 6273, 6276
Statistical Data, *See also: Demography; Morbidity; Mortality; Statistical Analysis; Survey;*, 5634, 5635, 5636, 5640, 5653, 5658, 5670, 5686, 5698, 5705, 5727, 5731, 5745, 5746, 5748, 5758, 5763, 5764, 5769, 5778, 5780, 5781, 5782, 5789, 5801, 5809, 5815, 5818, 5821, 5855, 5861, 5866, 5869, 5881, 5885, 5893, 5894, 5896, 5902, 5930, 5950, 5953, 5972, 5973, 5974, 5977, 5978, 5981, 5984, 5985, 5988, 5990, 5991, 5993, 5996, 5999, 6008, 6014, 6022, 6023, 6024, 6025, 6026, 6028, 6029, 6030, 6031, 6032, 6034, 6035, 6036, 6041, 6042, 6044, 6047, 6049, 6053, 6054, 6056, 6057, 6060, 6061, 6063, 6064, 6065, 6066, 6067, 6072, 6073, 6074, 6075, 6077, 6079, 6080, 6081, 6082, 6083, 6086, 6087, 6089, 6090, 6095, 6096, 6099, 6100, 6102, 6103, 6104, 6105, 6107, 6108, 6109, 6111, 6112, 6113, 6114, 6116, 6117, 6118, 6119, 6120, 6122, 6123, 6124, 6125, 6126, 6128, 6131, 6132, 6133, 6134, 6135, 6136, 6137, 6139, 6140, 6141, 6143, 6144, 6145, 6147, 6150, 6151, 6153, 6154, 6157, 6158, 6159, 6164, 6166, 6168, 6169, 6170, 6171, 6172, 6173, 6174, 6175, 6176, 6177, 6178, 6179, 6180, 6181, 6182, 6183, 6184, 6185, 6186, 6187, 6188, 6189, 6193, 6194, 6195, 6197, 6198, 6199, 6200, 6201, 6202, 6203, 6205, 6206, 6207, 6208, 6209, 6210, 6212, 6213, 6214, 6215, 6216, 6217, 6220, 6221, 6222, 6223, 6224, 6227, 6228, 6229, 6230, 6232, 6234, 6235, 6236, 6237, 6239, 6240, 6241, 6243, 6245, 6246, 6250, 6253, 6254, 6255, 6256, 6258, 6260, 6262, 6263, 6265, 6266, 6267, 6268, 6269, 6270, 6271, 6273, 6274, 6275, 6276, 6277, 6278, 6279, 6281, 6282, 6283, 6284, 6286, 6287, 6289, 6290, 6291, 6292, 6298
Student, *See also: Education; School Health;*, 5900, 5907, 5972, 6151, 6258, 6265
Student Selection, 5895, 5907, 5908, 5912, 5915, 5916, 5928, 5981
Supervision, 5622, 5915, 5980, 5985
Supervision, Auxiliary, 5622, 5634, 5915, 5930, 5980, 5985

Surgery, *See also: Anaesthesia;*, 5627, 5650, 5673, 5698, 5723, 5817, 5818, 5819, 5822, 5823, 5825, 5830, 5861, 5862, 5883, 5949, 5953, 6031, 6064, 6071, 6081
Survey, *See also: Attitudes; Data Collection; Demography; Epidemiology; Evaluation; Questionnaire; Research; Statistical Data;*, 5606, 5658, 5684, 5685, 5704, 5708, 5745, 5754, 5758, 5777, 5789, 5793, 5818, 5843, 5848, 5859, 5860, 5875, 5877, 5881, 5926, 5973, 5974, 5975, 5979, 5982, 5985, 5986, 5990, 5996, 6008, 6014, 6023, 6024, 6025, 6027, 6030, 6031, 6035, 6038, 6045, 6047, 6049, 6050, 6052, 6053, 6054, 6055, 6056, 6057, 6060, 6061, 6062, 6063, 6064, 6066, 6067, 6068, 6072, 6073, 6076, 6079, 6082, 6083, 6085, 6089, 6091, 6096, 6102, 6103, 6104, 6105, 6106, 6108, 6111, 6112, 6113, 6115, 6116, 6117, 6118, 6120, 6121, 6122, 6123, 6126, 6128, 6130, 6134, 6135, 6138, 6139, 6141, 6144, 6147, 6149, 6150, 6151, 6156, 6160, 6161, 6163, 6167, 6169, 6170, 6172, 6173, 6175, 6177, 6178, 6179, 6180, 6182, 6187, 6188, 6189, 6192, 6195, 6196, 6197, 6200, 6203, 6204, 6207, 6208, 6210, 6214, 6215, 6217, 6219, 6220, 6222, 6223, 6224, 6229, 6230, 6231, 6233, 6234, 6236, 6237, 6238, 6239, 6241, 6246, 6247, 6250, 6255, 6257, 6258, 6260, 6266, 6267, 6268, 6269, 6270, 6271, 6273, 6274, 6279, 6282, 6285, 6286, 6289, 6291, 6293, 6294, 6295, 6296, 6297, 6298, 6299, 6300

T

Teacher, *See also: Education; Health Manpower; School Health;*, 5608, 5610, 5614, 5624, 5625, 5814, 5912, 5972, 5984, 6136
Teaching Aid, *See also: Audiovisual Aid; Handbook; Teaching Method; Textbook; Training Manual;*, 5603, 5614, 5672, 5840, 5868, 5870, 5880, 5909, 5914, 5928, 5945, 5964, 5966, 5969, 5971, 6242
Teaching Aid, Child Health, 5909
Teaching Aid, Disease Control, 5966
Teaching Aid, Family Planning, 5971
Teaching Aid, Health Education, 5868, 5870, 5880, 5938, 5945, 5964, 5966, 5969
Teaching Method, *See also: Teaching Aid;*, 5614, 5625, 5869, 5873, 5907, 5914, 5928, 5938, 5964, 5984
Tetanus, *See also: Infectious Diseases;*, 5722, 5741, 5752, 5792, 5841, 5888, 6036, 6077, 6099, 6114, 6142, 6169, 6197, 6198, 6219, 6230, 6241, 6244, 6289
Textbook, *See also: Teaching Aid;*, 5923, 5941, 5949, 5954, 5961
Trachoma, *See also: Eye Diseases;*, 5763, 5855, 5967
Tradition, *See also: Culture;*, 5710, 5716, 5855, 5871, 5876, 5878, 5982, 6043, 6044, 6047, 6050, 6065, 6071, 6108
Traditional Birth Attendant, *See also: Auxiliary, Health Worker; Auxiliary, Midwife; Auxiliary, Nurse-midwife; Dai; Dukun; Hilot; Midwife; Traditional Practitioner;*, 5624, 5710, 5770, 5829, 5886, 5926, 5927, 5928, 5977, 5982, 6043
Traditional Medicine, *See also: Culture; History of Health Services; Medicinal Plant; Traditional Practitioner;*, 5624, 5639, 5649, 5660, 5669, 5709, 5711, 5712, 5713, 5714, 5717, 5780, 5822, 5828, 5852, 5895, 5925, 5944, 6011, 6012, 6031, 6043, 6045, 6046, 6048, 6050, 6057, 6058, 6059, 6060, 6062, 6063, 6071, 6072, 6097, 6172
Traditional Practitioner, *See also: Traditional Birth Attendant; Traditional Medicine;*, 5619, 5624, 5678, 5709, 5711, 5712, 5717, 5973, 5999, 6014, 6043, 6045, 6057, 6058, 6059, 6063
Training, *See also: Continuing Education;*, 5601, 5603, 5610, 5612, 5613, 5614, 5616, 5619, 5622, 5623, 5625, 5626, 5629, 5630, 5632, 5633, 5644, 5646, 5649, 5659, 5663, 5664, 5666, 5672, 5685, 5691, 5696, 5697, 5715, 5717, 5748, 5787, 5811, 5812, 5814, 5829, 5834, 5836, 5839, 5840, 5846, 5847, 5850, 5853, 5883, 5895, 5896, 5897, 5898, 5899, 5900, 5901, 5902, 5903, 5905, 5906, 5907, 5908, 5909, 5909, 5910, 5911, 5912, 5913, 5914, 5915, 5916, 5918, 5920, 5922, 5923, 5924, 5925, 5926, 5927, 5928, 5929, 5930, 5931, 5932, 5933, 5935, 5936, 5937, 5947, 5951, 5952, 5960, 5963, 5972, 5975, 5977, 5978, 5980, 5981, 5984, 5985, 5986, 5994, 6003, 6004, 6006, 6007, 6015, 6016, 6026, 6028, 6030, 6242
Training Centre, *See also: School; University;*, 5613, 5625, 5630, 5646, 5925, 5934
Training Centre, Auxiliary, 5630
Training Course, *See also: Curriculum;*, 5814, 5847, 5883, 5908, 5914, 5918, 5927, 5928, 5986
Training Course, Auxiliary, 5847, 5883, 5914
Training Manual, *See also: Teaching Aid;*, 5954, 6242
Training Manual, Auxiliary, 5608
Training Manual, Sanitation Manpower, 5954
Training Manual, Teacher, 5608
Training, Administrator, 5623, 5696, 5752, 5787, 5847, 6003, 6004
Training, Auxiliary, 5603, 5608, 5619, 5624, 5629, 5630, 5663, 5812, 5936
Training, Barefoot Doctor, 5895
Training, Community Health Aide, 5622
Training, Community Health Worker, 5634, 5680, 5846, 5847, 5850, 5853, 5915, 5916, 5963, 5981, 5985, 6019
Training, Dental Auxiliary, 5930, 5932
Training, Dental Hygienist, 5932
Training, Dental Manpower, 5904, 5930
Training, Dentist, 5929, 5930, 5931, 5932
Training, Health Educator, 5937
Training, Health Extension Officer, 5715, 5904
Training, Health Inspector, 5946
Training, Health Manpower, 5601, 5614, 5624, 5625, 5626, 5630, 5632, 5633, 5640, 5644, 5646, 5649, 5659, 5660, 5664, 5666, 5669, 5672, 5685, 5904, 5912, 5951, 5952, 5955, 5960, 5967, 5975, 5984, 6003, 6015, 6028
Training, Lady Health Visitor, 5834
Training, Medical Assistant, 5622, 5883, 5900, 5918, 5980, 6006
Training, Medical Officer, 5911
Training, Midwife, 5613, 5900, 5904, 5926

Training, Midwife Auxiliary, 5613
Training, Nurse, 5613, 5691, 5748, 5900, 5918, 5920, 5922, 5923, 5924, 5925, 6026
Training, Nurse Auxiliary, 5613
Training, Nurse Practitioner, 5622, 5904, 5978
Training, Nurse-midwife, 5986
Training, Paramedic, 5914, 5947
Training, Pharmacist, 5659
Training, Physician, 5612, 5616, 5659, 5669, 5680, 5685, 5697, 5700, 5839, 5843, 5895, 5896, 5897, 5898, 5899, 5900, 5901, 5902, 5903, 5904, 5905, 5906, 5907, 5908, 5909, 5910, 5911, 5912, 5913, 5972, 5994, 6007, 6013, 6016, 6026, 6030
Training, Rural Health Promoter, 5836, 5840, 5930
Training, Sanitary Engineer, 5933
Training, Sanitation Manpower, 5935
Training, Single-purpose Auxiliary, 5616
Training, Social Worker, 5613
Training, Teacher, 5608, 5610, 5614, 5624, 5625, 5811, 5814, 5912, 5984, 6136
Training, Traditional Birth Attendant, 5624, 5829, 5927, 5928, 5977
Training, Traditional Practitioner, 5624, 5717
Transport, 5653, 5673, 5681, 5699, 5701, 5702, 5722, 5787, 5860, 5862, 5890, 5943, 5957, 5987, 6031, 6080, 6224
Tribes, *See also: Masai; Minority Group; US Indian Health Service; Zulu;*, 5719, 5824, 5855, 5983, 6031, 6033, 6043, 6047, 6048, 6055, 6059, 6060, 6063, 6070, 6071, 6108, 6115, 6128, 6134, 6138, 6147, 6167, 6209, 6214, 6248, 6269, 6289, 6290, 6293
Tropical Medicine, 5607, 5695
Tropical Zone, 5723, 5725, 5736, 5737, 5740, 5750, 5816, 5817, 5823, 5825, 5961, 6084
Trypanosomiasis, *See also: Parasitic Diseases;*, 5751, 5761, 5775, 5776, 5785, 6086, 6156, 6223
Tubal Ligation, *See also: Birth Control;*, 6049, 6064, 6199
Tuberculosis, *See also: Infectious Diseases; Tuberculosis Programme;*, 5669, 5682, 5722, 5727, 5741, 5752, 5792, 5794, 5798, 5801, 5824, 5837, 5841, 5850, 5889, 5943, 5955, 5960, 5961, 5966, 6011, 6039, 6055, 6080, 6099, 6101, 6110, 6133, 6139, 6144, 6153, 6169, 6187, 6209, 6212, 6219, 6228, 6248, 6250, 6272, 6283, 6296
Tuberculosis Programme, *See also: BCG Vaccination; Clinic, Tuberculosis; Tuberculosis;*, 5794, 5837, 5838, 5850, 5960, 6272
Typhoid Fever, *See also: Infectious Diseases;*, 5727, 5739, 6077, 6099, 6184

U

UNICEF, *see also: International Organization;*, 5687
University, 5678, 5711, 5779, 5913
Urban Area, 5643, 5684, 5738, 5747, 5754, 5758, 5786, 5831, 5897, 5925, 5973, 5996, 6052, 6061, 6062, 6069, 6089, 6091, 6102, 6103, 6104, 6105, 6116, 6131, 6132, 6150, 6169, 6171, 6177, 6178, 6197, 6202, 6206, 6215, 6256, 6273, 6275, 6280, 6290, 6295
Urbanization, 5711, 5719, 5950, 6052, 6062, 6091, 6103, 6105, 6106, 6211
US Indian Health Service, 5983
Utilization Rate, 5670, 5684, 5708, 5710, 5770, 5821, 5977, 5990, 5994, 5999, 6023, 6024, 6025, 6031, 6042, 6045, 6048, 6053, 6057, 6060, 6062, 6064, 6066, 6067, 6224
Utilization, Clinic, 5999
Utilization, Dental Services, 6067
Utilization, Dispensary, 5999
Utilization, Health Centre, 5994
Utilization, Health Services, 5670, 5684, 5990, 6023, 6025, 6031, 6045, 6048, 6053, 6057, 6060, 6062, 6064, 6066, 6224
Utilization, Hospital, 5821, 6032, 6042
Utilization, Maternal Child Health Services, 5710, 5770, 5977
Utilization, Mental Health Services, 6024

V

Vaccination, 5722, 5777, 5784, 5787, 5792, 5812, 5841, 5888, 5942, 5970, 5993, 6001, 6036, 6037, 6079, 6080, 6110, 6111, 6142, 6155, 6169, 6198, 6218, 6219, 6228, 6244, 6295
Vaccination Programme, 5722, 5741, 5747, 5752, 5777, 5787, 5792, 5841, 5859, 6001, 6080, 6089, 6109, 6110, 6111, 6142, 6155, 6169, 6174, 6198, 6218, 6219, 6232, 6244, 6283, 6296
Vasectomy, 6199
Venereal Diseases, 5602, 5721, 5763, 5780, 5793, 5809, 5811, 5939, 6031, 6092, 6133, 6153, 6161, 6233, 6240, 6250, 6297
Village, 5603, 5634, 5711, 5732, 5828, 5829, 5835, 5836, 5847, 5855, 5868, 5872, 5873, 5891, 5892, 5915, 5916, 5917, 5963, 5981, 5985, 5990, 6035, 6036, 6044, 6057, 6063, 6065, 6072, 6073, 6083, 6102, 6103, 6112, 6132, 6140, 6170, 6179, 6193, 6204, 6223, 6247, 6251, 6255, 6264, 6266, 6271, 6278, 6279, 6299
Vitamin Deficiency, 5604, 5756, 5760, 5772, 5800, 5802, 5806, 5816, 5970, 6087, 6090, 6118, 6160, 6196, 6207, 6265, 6273
Voluntary Organization, 5601, 5796, 5938, 6011
Volunteer, 5641, 5847, 5855, 5919, 5938, 5939, 6046

W

Waste Disposal, *See also: Sanitation;*, 5725, 5863, 5946, 5948, 5954, 5996, 6117
Water Supply, *See also: Construction, Water Supply; Environmental Health; Water Treatment;*, 5656, 5686, 5706, 5739, 5753, 5797, 5838, 5843, 5860, 5887, 5891, 5934, 5935, 5946, 5948, 5954, 6072, 6073, 6084, 6131, 6145, 6172, 6185, 6186, 6204, 6216, 6221, 6246, 6261, 6264, 6275
Water Treatment, *See also: Environmental Health; Water Supply;*, 5753, 5838, 5860, 5887, 5934, 5935, 5946, 5954, 6072, 6221

WHO, *see also: International Organization;*, 5607, 5610, 5624, 5625, 5656, 5673, 5687, 5693, 5694, 5695, 5752, 5754, 5787, 5812, 5912, 5967, 5969, 6018, 6027, 6032, 6100, 6149, 6190

Women, *See also: Social Structure;*, 5715, 5719, 5731, 5741, 5759, 5778, 5813, 5866, 5873, 5876, 5881, 5918, 5950, 6036, 6047, 6049, 6056, 6060, 6061, 6064, 6065, 6090, 6103, 6104, 6105, 6123, 6163, 6192, 6193, 6200, 6206, 6207, 6219, 6222, 6237, 6251, 6266, 6289, 6297, 6298

X

X-ray Technician, *See also: Health Manpower;*, 5619, 6028

Y

Yaws, *See also: Skin Diseases; Venereal Diseases;*, 5763, 6092

Yellow Fever, *See also: Infectious Diseases;*, 5749, 6232

Z

Zulu, *See also: Tribes;*, 5948

Geographic Index

(figures refer to abstract numbers)

A

Africa, *See also: regional name(s), e.g., East Africa and specific country name(s);*. 5635, 5645, 5661, 5678, 5713, 5745, 5749, 5773, 5774, 5815, 5820, 5857, 5874, 5891, 5906, 5932, 5939, 5940, 5941, 5958, 5964, 5965, 6017, 6043, 6155, 6189, 6248
Algeria, 5693, 5838, 6281
Asia, *See also: regional name(s), e.g., Middle East and specific country name(s);*. 5614, 5745
Australia, 5658, 5675, 5708, 5854, 5896, 5904, 5921, 6024, 6069, 6113, 6127, 6152, 6162, 6165

B

Bahamas, 6172
Bahrain, 5989, 6111, 6152
Bangladesh, 5727, 5768, 5832, 5834, 5874, 6000, 6006, 6123, 6152, 6254
Belgium, 5693, 5708
Benin, 5748
Bhutan, 5821, 5835
Bolivia, 6210
Botswana, 5916, 6043, 6167
Brazil, 5682, 5691, 5751, 5762, 5786, 5837, 5863, 5909, 5990, 5994, 5998, 6012, 6045, 6086, 6116, 6138, 6173, 6202, 6232, 6267, 6268, 6295
Burma, 5687, 6207

C

Cameroon, 5612, 5761, 5887, 5984, 6001, 6142, 6174, 6244, 6247, 6279
Canada, 5708, 5899, 5956, 6033, 6055, 6127, 6208
Caribbean, *See also: Latin America, West Indies, and specific country name(s);*. 5721, 5782, 5899, 5941, 5986
Central America, *See also: specific country name(s);*. 6090
Chile, 5617, 5783, 6012, 6016, 6020, 6021, 6088, 6109, 6110, 6234, 6286
China PR, 5647, 5649, 5658, 5822, 5852, 5895, 5925, 6097, 6160
China R, 6058, 6152
Colombia, 5684, 5758, 5866, 5904, 5973, 5984, 6022, 6061, 6074, 6075, 6116, 6204, 6206
Costa Rica, 5865, 6012
Cuba, 5626, 5628, 5630, 5651, 5809, 5849, 5929, 6013, 6257
Cyprus, 5640

D

Dahomey, 6043
Denmark, 5708, 5780, 6127

E

East Africa, *See also: specific country name(s);*. 5720, 5862, 5957
Ecuador, 6115
Egypt, 6073, 6147
El Salvador, 6250
Ethiopia, 5646, 5653, 6070, 6134, 6161, 6185, 6300
Europe, *See also: specific country name(s);*. 5614, 5623, 5774, 5810, 5811, 5911

F

Fiji, 5737, 6243
Finland, 5687, 5904
France, 5616, 5645, 5693, 5708
French Guyana, 6233

G

Gambia, 5748, 6129
Germany FR, 5693, 5708, 6127
Ghana, 5644, 5660, 5710, 5722, 5839, 5868, 6003, 6043, 6072, 6079, 6080
Gilbert Islands, 5795, 6152, 6186
Greece, 5693
Guadeloupe, 6246
Guam, 6152
Guatemala, 5634, 5650, 5729, 5930, 5962, 5963, 6046, 6107, 6193, 6264, 6299

H

Haiti, 5833, 6078, 6236, 6237
Honduras, 5984
Hong Kong, 6152
Hungary, 5693

I

India, 5633, 5641, 5659, 5660, 5665, 5666, 5674, 5680, 5685, 5686, 5711, 5727, 5731, 5790, 5798, 5815, 5827, 5845, 5847, 5874, 5875, 5881, 5886, 5892, 5915, 5963, 5977, 5985, 5993, 6004, 6005, 6007, 6014, 6019, 6029, 6035, 6036, 6056, 6057, 6064, 6081, 6089, 6101, 6117, 6118, 6119, 6120, 6131, 6132, 6135, 6136, 6137, 6143, 6146, 6152, 6169, 6170, 6178, 6182, 6191, 6197, 6201, 6213, 6214, 6235, 6239, 6240, 6241, 6242, 6252, 6256, 6258, 6260, 6262, 6263, 6265, 6266, 6269, 6275, 6276, 6277, 6288, 6291
Indonesia, 5803, 5831, 5908, 5955, 5982, 6065, 6179, 6207, 6280, 6294
Iran, 5777, 5981, 6044, 6052, 6062, 6085, 6096, 6146, 6151, 6163, 6238
Iraq, 6040, 6180, 6212
Ireland, 5693, 5727
Israel, 5708, 6152
Italy, 5693, 6152
Ivory Coast, 5639, 5741, 6283

J

Jamaica, 5721, 5884, 5885, 5952, 6084, 6092, 6168, 6194, 6245
Japan, 6152, 6205, 6255
Jordan, 6175

K

Kenya, 5632, 5635, 5760, 5774, 5815, 5862, 6060, 6144, 6188, 6261, 6271, 6278, 6287
Korea R, 5843, 5963, 6227
Kuwait, 5763, 6111

L

Laos, 6207
Latin America, *See also: regional name(s), e.g., Central America and specific country name(s);*, 5655, 5661, 5676, 5689, 5721, 5745, 5751, 5776, 5805, 5814, 5874, 5899, 5917, 5960, 5965, 6012, 6017, 6088, 6226, 6248
Lebanon, 5984, 6091
Lesotho, 6124
Liberia, 6043
Libya, 5763

M

Malagasy R, 5616, 5645
Malawi, 5643
Malaysia, 5698, 5770, 5800, 5984, 6011, 6152, 6207, 6270
Mali, 5687, 5767, 6043, 6251
Mexico, 5637, 5735, 5836, 5840, 5869, 5904, 6012, 6071, 6114, 6133, 6223, 6253, 6272, 6284
Micronesia, 5878
Middle East, *See also: specific country name(s);*, 5745, 5873
Morocco, 5638
Mozambique. 5687

N

Nepal, 5859, 5904, 5984
Netherlands, 5708, 6127
New Hebrides, 5789
New Zealand, 5842
Nicaragua, 5872, 5880, 6082
Nigeria, 5658, 5709, 5712, 5801, 5817, 5818, 5848, 5861, 5864, 5987, 5996, 5999, 6023, 6031, 6042, 6047, 6050, 6063, 6076, 6077, 6083, 6095, 6128, 6140, 6145, 6146, 6153, 6177, 6195, 6218, 6219, 6220, 6221, 6224, 6225, 6285
Norway, 5693, 5780

P

Pakistan, 5697, 5734, 5769, 5779, 5781, 5808
Panama, 6090
Papua New Guinea, 5687, 5904, 6054, 6068, 6069, 6108, 6154, 6243, 6248
Paraguay, 6166
Peru, 5944, 6012, 6156, 6171
Philippines, 5718, 5760, 5850, 5853, 5874, 5876, 5877, 5904, 5927, 5928, 5971, 5978, 6013, 6014, 6152, 6196, 6198, 6207, 6222, 6273
Polynesia, 6141
Portugal, 6152
Puerto Rico, 5988, 6216, 6217

R

Rhodesia, 5846, 5900

S

Sahel, 5935
Santa Lucia, 5995, 6125, 6126
Saudi Arabia, 5738, 6229
Scotland, 5904
Senegal, 5828, 5829, 6043, 6102, 6103, 6104, 6105, 6106, 6122, 6139, 6148, 6215
Sierra Leone, 6015, 6043, 6181
Singapore, 5716, 5919, 5921, 6049, 6228, 6296
Solomon Islands, 5860, 6094
Somalia, 6209
South Africa, 5621, 5747, 5802, 5824, 5855, 5871, 5948, 5997, 6098, 6152, 6157, 6192, 6293, 6297
South America, 5614
South Pacific, *See also: specific country name(s);*, 6243
Southeast Asia, 5660, 5669, 5906, 6184, 6207
Sri Lanka, 5796, 5874, 5972, 6030, 6112, 6152
Sudan, 5660, 5856, 6014, 6282
Sweden, 5658, 5708
Switzerland, 5708

T

Tanzania, 5660, 5862, 6017, 6020
Thailand, 5605, 5904, 5921, 6087, 6183, 6207, 6230, 6289, 6290
Togo, 5904, 6051, 6093
Trinidad and Tobago, 5921
Tunisia, 5629, 5642, 6159

U

Uganda, 6051
UK, 5658, 5708, 5711, 5763, 5946, 6127, 6129
Upper Volta, 5613, 5715, 5890
Uruguay, 5765, 5766
USA, 5601, 5605, 5614, 5620, 5622, 5648, 5654, 5671, 5699, 5701, 5702, 5704, 5705, 5708, 5718, 5780, 5840, 5851, 5867, 5878, 5879, 5899, 5902, 5903, 5914, 5918, 5937, 5950, 5974, 5976, 5979, 5980, 5983, 5988, 5991, 5992, 6002, 6025, 6028, 6034, 6038, 6041, 6048, 6053, 6066, 6067, 6127, 6130, 6152, 6164, 6264
USSR, 5727, 5804

V

Venezuela, 5780, 5931, 5934, 5975, 6116
Vietnam, 5757, 5984, 6207, 6231

W

West Africa, *See also: specific country name(s);*, 6152
Western Pacific, *See also: specific country name(s);*, 6274

Y

Yemen, 5687, 5904
Yugoslavia, 5904

Z

Zaire, 5715, 5841, 6043, 6158, 6187
Zambia, 5759, 5844, 6051, 6099, 6121, 6298

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